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BALTIMORE, SEPTEMBER 4, 1913.

### OPPORTUNITY FOR SOUTHERN CLAY.

In the increasing popularity of brick for street and road paving in the South is an opportunity for the utilization of Southern clays that should be quickly seized and turned to account. At present the South is not using its clays to anything like the extent that is possible and that would be profitable. Last year the value of all clay products in the country was \$172,811,275, to which the South contributed only \$31,285,039, or less than one-fifth. The value of the country's output of brick and tile was \$136,307,111, the South's share being \$27,199,029. The output by States in the South of brick and tile and of all clay products was as follows:

	Bricks and Tile.	All Clay Products.
Alabama . . . . .	\$1,912,966	\$1,935,179
Arkansas . . . . .	433,648	462,605
Dist. of Columbia . . . . .	217,486	217,486
Florida . . . . .	272,766	272,766
Georgia . . . . .	2,787,484	2,896,541
Kentucky . . . . .	2,329,536	2,443,740
Louisiana . . . . .	523,643	523,643
Maryland . . . . .	1,681,042	1,865,753
Mississippi . . . . .	589,093	601,799
Missouri . . . . .	6,409,346	6,412,861
North Carolina . . . . .	1,456,703	1,465,653
Oklahoma . . . . .	535,318	535,318
South Carolina . . . . .	697,802	704,563
Tennessee . . . . .	1,327,850	1,501,916
Texas . . . . .	2,739,464	2,886,068
Virginia . . . . .	1,874,174	1,874,174
West Virginia . . . . .	1,410,708	4,775,874
Total . . . . .	\$27,199,029	\$31,285,039
United States . . . . .	\$136,307,111	\$172,811,275

It is suggestive of the South's oppor-

tunity, with its abundance of clays of many kinds, to note that two States, Ohio and Pennsylvania, had in 1912 brick and tile to the value of \$28,711,454, or \$1,512,423 greater than the value of brick and tile made in the South, and that the value of clay products in Ohio alone was \$3,525,469 greater than the value of such products in the South. Ohio led in the value of pottery with \$15,508,735, but in recent years, because of the use of its natural gas, West Virginia has advanced to third place, and in 1912 produced pottery to the value of \$3,365,106.

### CAR SERVICE, SURPLUS AND SHORTAGE.

That there will exist on the railroads of the United States on November 1 a net shortage of at least 75,000 cars as compared with a net surplus of 40,000 cars on May 1 of this year is indicated in a pamphlet entitled "A Forecast of the Car Supply," privately printed by the scientific department of the Clinchfield Fuel Co., Spartanburg, S. C., and based upon a study of conditions prevailing since 1907, the author being J. G. Dailey. The author states that it is not wild to predict a net shortage of from 125,000 to 150,000 cars at that time.

Several blue-print charts, accompanied by explanatory letter press, are presented, so that readers may observe in detail what have been the conditions with respect to the supply of cars for railroad service since the panic of 1907. Mr. Dailey submits an analysis of these data, showing that on May 1, 1908, when general business was apparently at its lowest ebb following the great financial disturbance of the previous autumn, there was a net surplus of 400,000 cars, and that on the November 1 following the surplus was 100,000 cars, service having been found for 300,000 of them. In May, 1909, there was a surplus of 280,000 cars, but in November there was a net shortage of 25,000 cars, the shrinkage being 305,000 cars. In 1910 conditions were more even, a comparatively moderate surplus of 120,000 cars on May 1 being reduced by only 115,000 cars to a net surplus of 5000 cars on November 1. In the next year, however, the gap widened once more, the May surplus being 180,000 cars and the November surplus 20,000 cars. Last year the gulf was greater, although the surplus was smaller in May (135,000 cars) while the shortage in November was 75,000, the difference being 210,000 cars.

Mr. Dailey's charts are excellent means of studying the fluctuations in the car supply. Each has a zero line, and there are other parallel lines above and below the former revealing surplus and the latter shortage in thousands of cars. Another line, standing for the car supply, goes up or down, according to the supply of cars as each year advanced, continuing above the

zero line so long as there was a surplus and going below it when there was a shortage. This line regularly ascends in the spring, showing the surplus of cars usual then and as regularly falls in the autumn, when crop moving makes such demands upon the railroads that the car supply develops a shortage. For this year the line on June 15 (which is the last date considered in the pamphlet) was very close to the same point reached on the chart for last year at the same time. He remarks that it shows faltering uncertainty. At the beginning of 1913 there was a surplus of 30,000, which fell to 20,000, rose to 55,000, dropped to 45,000 and rose again to 65,000, which was the June 15 position. Now, in September, the influence of the movement of crops is being felt, and the line is declining toward its usual November depression. Recently-published figures show that the net surplus of cars has declined about 10,000 cars from the June figures shown here.

As the railroads are endeavoring to obtain greater use of their respective cars by reducing the amount of delays in loading and unloading, the facts presented in the pamphlet are at present quite pertinent. To everyone interested in the subject they must furnish food for serious thought, because the car-service question is one of great economic importance not only to the railroad companies, but to commerce and industry. Notwithstanding recent additions which have been made to their equipment, it seems that the lines will have soon to buy more engines and cars, although it is too late to obtain them in time to relieve the pressure of demand to handle the rush of traffic this fall. They may, however, be contracted for with assurance that they will be quite as much needed next year, because there is every prospect that the volume of business upon the lines will continue to grow in the ratio revealed by the annual railroad reports which are now being published. During the sixteen years from 1895 to 1910, inclusive, according to one of Mr. Dailey's charts, the total supply of cars in the United States increased from 1,200,000 to over 2,100,000, which indicates that by this time there must have been an increase of fully 100 per cent., and this in itself speaks the need for the roads to keep pace with the demands made upon them.

### WHY ANY HOUSE.

Instead of a House of Governors who are intent upon junketing or making political capital for themselves, why not substitute a House of Delegates, made up yearly of experts specially charged with the functions of considering a group of interstate measures, covering some special field?

This question by the New York Times might well be answered by a second question, Why a House of Delegates or a House of any kind? Only experts in self-exploitation would have time to attend the yearly functions sug-

gested. The country is fully equipped already with legitimate organizations capable of meeting in their own way and to the satisfaction of the people of the country every problem that might be brought before a House of Governors, a House of Delegates or any House of the kind. Because of the multiplication in recent years of such devices as the House of Governors and the divers and sundry congresses, conventions, parliaments, etc., men of serious mind and serious purpose hesitate to participate actively in any public gathering, and the country is thereby the loser. Instead of encouraging, even indirectly, the craze for additional organizations, a craze out of which self-advertised advertising "experts" make their main capital, the sober mind of the country should address itself to the task of suppressing about 70 per cent. of the organizations already engaging in meeting and talking. Then there would be the chance for something to be done.

### AN IMMIGRATION WARNING.

Within ten months, from July 1, 1912, to May 1, 1913, Austria-Hungary sent 183,000 immigrants to the United States. Citing these figures, C. Dumoa, the Austro-Hungarian Ambassador to the United States, says in *American Industries*:

The part taken by these immigrants in the national production of the Union, the influence exercised on the labor market by the constant influx of mostly totally unskilled workmen, the racial question raised by the greater fertility of the people of Eastern Europe, are certainly worthy of the greatest attention of the American public at large. In my opinion, it is high time in the interest of the predominance of the Anglo-Saxon race and its characteristic virtues of indomitable vitality, energy and love of freedom to restrict by law the inundation of America with foreign elements. The national character of the cities of New York and Boston, nay of the whole of New England, will hardly be maintained intact in presence of this constant influx of aliens of inferior civilization. It is incumbent upon the leading political men—this is my conviction—to make every effort to limit the quantity and to improve the quality of these elements.

Ambassador Dumoa is as much concerned about the effect upon his own country of the exodus of many representatives of what he describes as the strongest and most active element in the national production as about the effect upon the United States of the influx from Southern Europe which dominates in immigration of this day. The races which are now thronging to this country are utterly alien to the elements which have fused in the making of the United States. Many of the newcomers are of the agricultural class in their native lands, but they come to America not to go upon the land where they might work out their own Americanization with advantage to themselves and to the country, but to mass in the great cities, where they are hampered in getting close to the influences that might make them less alien in every respect and where, consequently,

they become the special prey of leaders of their own race or of degenerates of native stock who control those leaders. Thus is increased the menace to the whole moral, political and social fabric of America. Leading political men are about the last individuals to be expected to limit the quantity and improve the quality of these elements that are now thronging to this country. Politicians, big and little, are the ones responsible for the thronging. They thrive upon the hyphenated classes in party politics. Some of them are immediately subject to the very foreign influences that have for many years been active in opposition to restriction upon immigration, influences that have reached right into the inner circle of more than one Federal administration. The less the politicians are allowed to do with the question, the better it will be for the country. The remedy lies in substituting for politicians in public office men who will serve their country right.

#### SUGGESTED BY A CRITIC.

A letter dated Middlesboro, Ky., and signed McD. Purcell, whom we do not at the moment associate with any personal acquaintanceship, says:

For the last six or eight months I have been reading each week the MANUFACTURERS RECORD, and in that time I have noticed one article that praised the efforts of the party in power at Washington to do its duty as it sees it. That was in your issue of August 14th. In an editorial you commended Mr. Wilson's peace policy in regard to Mexico. In another article, written some months back, you simply refuted a statement that Assistant Secretary Williams represented Wall Street. If you have ever spoken in any other than a vituperative way, except in these two instances, I have failed to see it. Do you not think, if your desire to help the South is as sincere as you represent it, it would be well to use a somewhat less critical and abusive vein in writing of the South's chosen representatives, who constitute to a great extent not only the rank and file of the present government, but the leading element as well, and who, in pushing the pending bills through, are obeying the commands of the people of this section? If, on the other hand, your professed interest in the South's welfare is but a sham, and your real object the promotion of the schemes of the Big Interests in the exploitation of the South's resources, I heartily approve of your method as one of the most likely to bring results.

The suggestions in this letter as to the sincerity of the MANUFACTURERS RECORD in its work for the welfare of the South have rather a familiar twang about them, and, though highly amusing, though wearying, to the many readers of the MANUFACTURERS RECORD acquainted with the results for the South of that work of nearly thirty-two years, ought to bar the letter from serious consideration on our part. The insinuations reveal a regrettable state of mind disqualifying one from exercising his faculties adequately and reasonably. Else, he would have selected some other word than vituperative in seeking to characterize accurately our criticism of the legislative conduct of the element at present dominant in the Congress at Washington, and he would not have been able to recognize in its "pushing the pending bills through" obedience to the commands of the people of the South or of any other part of the country as far as such commands are a matter of record.

Recorded commands of the minority political party represented by the majority in the Congress were that there should be a "tariff for revenue only" attained by legislation "that will not injure or destroy legitimate industry," and a banking system that would be

free "from control or dominion by what is known as the Money Trust."

The House of Representatives enacted a bill providing a tariff for less than revenue needed and, to meet the acknowledged deficit, an income tax of most undemocratic texture and confessedly aimed against a limited class of persons. Into the House was introduced a currency measure that would make it possible to place the banking system of the country in the control and dominion of politicians.

We criticised the tariff-income tax bill as it made its caucus-clogged way through the House of Representatives, and our judgment of it was largely sustained in the report by the Democrats of the Senate finance committee in such statements as:

Paragraph D is further amended to obviate the constitutional objection to computing the tax on income accruing prior to the date on which the amendment to the Federal Constitution authorizing the tax went into effect.

Your committee conceived that so much of the provision of paragraph E as requires lessees of real estate to make return of rents and withhold and pay the tax would prove, in many cases, impracticable of administration.

We struck out the very drastic language of the House, line 3 . . . We had doubts of the constitutionality of that provision, but no doubt at all that it was of very doubtful expediency.

We struck out paragraphs U, V and W of the House bill, all being new, and, in our opinion, drastic and capable of abuse, if not certain of being abused.

Your committee struck out subsection 7 . . . The provision was in contravention of some 19 or 20 treaties of the United States, without having been preceded by the courtesy of a notice of revocation.

We struck out the dumping clause of the House provision, first, because it applied to only dutiable articles, and, if to be applied to any articles at all, it seemed to us it ought to apply to all.

Beyond our criticism of the currency bill because of its stressing of Government control of the banking system, we have had little to say as to that measure. The "leading elements" have been divided among themselves in their caucus, and a sidelight upon that caucus was thrown in a dispatch to the New York Times under date of August 27, which said:

A peculiar situation has developed in the currency caucus. For two days it has lacked a quorum by a narrow margin, and unless a quorum is obtained by tomorrow or the following day, the bill cannot be disposed of by the caucus before next week, while the friends of the Administration in the House will be in an embarrassing situation . . . As a result of this situation Representative A. Mitchell Palmer, chairman of the caucus, has sent out a hurry call to all Democratic members, urging them to attend the caucus, or, if absent, to return to Washington immediately to enable the leaders to maintain a quorum for the consideration of the bill. The absentees are mostly friends of the bill. They did not absent themselves, it appears, to embarrass the leaders, but more from carelessness, believing, after the first decisive test votes were taken, that their votes probably would not be needed.

Today there were eighty-one Democrats present when a test vote was taken. A quorum in the caucus is 146 members, so that there were sixty-five less than a quorum present, despite the fact that nearly 200 Democrats only a few hours before were in the hall of the House when President Wilson delivered his message on the Mexican situation. Mr. Underwood has also sent an urgent appeal to all Democrats to be present. The bill could have been disposed of in the caucus today if there had been a quorum present.

Respectfully referred to our correspondent who writes of the leading element in the Congress as "pushing the pending bills through."

Bearing directly upon the caucus-clogging of legislation that has rendered the majority measures in the

present Congress especially subject to criticism is the criticism of the Democratic caucus of the Senate made last Friday by Senator Hitchcock of Nebraska. He said:

To my mind, it was, to say the least, a mistake to endeavor in a Democratic caucus to bind the individual to the details, for instance, of the pending section providing an income tax. The income tax is a comparatively new idea in revenue legislation in this country. It involves great questions. It has its advocates on the other side of the Chamber as well as on this side of the Chamber. The collection of an income tax has become a matter of distinct constitutional right by Congress, and Republicans as well as Democrats voted for and assisted in securing the amendment to the Constitution to that effect.

When the income-tax question comes into this Chamber, involving as it does not only the degree to which taxation shall be levied upon the incomes of the country, but involving also great social changes which may follow, it seems to me that the individual Democrat, like the individual Republican, ought to be permitted by his party to stand here and vote for his convictions.

After all, Senators here were elected to the Senate not to a caucus, and it is in the interest of the public welfare that great questions of this sort be debated in public and decided in public, particularly when we are engaged in formative, fundamental legislation of this sort.

So, Mr. President, it seemed to me a mistake when my party undertook to decide the details of the income-tax bill in the caucus.

It has been an unpleasant sight to me, as it has been to many Democrats during the last few days in this Chamber, when Senators on the Republican side of the Chamber have proposed amendments to the income-tax provision that appeal to the sense of justice and appeal to the judgment of Senators on this side, but who, because of caucus rule, were compelled to vote against such amendments. I do not think that is a worthy sight in the Senate of the United States. I do not believe it is right to bind individual Senators and compel them to vote against their conscience and their judgment upon such amendments when no party policy is involved.

Then, in exemplification of caucus methods, Senator Hitchcock, referring to his efforts to have an amendment to the bill made, said:

This was the only opportunity I would have, or that any other Senator would have, to offer such an amendment at this session or probably at the next session. I did not, however, ask the caucus to approve my amendment; I asked to be left free to offer it here in the Senate, and I asked that other Democratic Senators be left free to vote for it according to their consciences and their judgment. I was refused. The Senator from Arizona (Mr. Ashurst), however, offered by amendment, and after a heated controversy it came to a vote in that caucus. The votes have been published, so I am revealing none of the secrets of that caucus when I say that eighteen members of the Senate voted for my amendment and twenty-three appeared to vote against it. I say "appeared" because it is a fact, which I shall take the liberty of stating, that the nine Democratic members of the Committee on Finance voted as a unit, regardless of their convictions. So we have a wheel within a wheel, a machine within a machine. The inner machine controlled the caucus. The vote cast was not the correct expression even of the caucus.

Mr. President, under these circumstances I felt that I was justified and that I could still maintain my Democracy in leaving the caucus and coming here and offering my amendment, as I do today, to this bill.

To be sure, our correspondent, like the great majority of the people of the country, depending, perhaps, upon the daily newspapers, and, consequently, unaware of the actual details of the attempted legislation at Washington and its circumstances, could not know of the unrest of members of the "leading element" at the methods of "pushing through" the legislation. But ignorance should always be careful about correcting others.

Six or eight months' reading of the MANUFACTURERS RECORD ought to have

taught our correspondent that it is not a political newspaper, and, consequently, in its discussions of questions of political party origin or of any other origin and affecting the fortunes of the South, it is not hobbled by any party caucus or party platform, but its aim is the progress and prosperity of the South and the welfare and happiness of the people of the South. And the MANUFACTURERS RECORD knows that that means the welfare and happiness of the people of the whole country.

It is the easiest thing in the world to be "popular," but that ease frequently involves greater sacrifices than those required in expressing one's convictions, regardless of criticism, greater sacrifices because they lower the morale.

#### THE CLEARING-HOUSE AS A BASIS IN BANKING.

Referring to the MANUFACTURERS RECORD's position as to the consideration that should be given to the principle of the clearing-house on currency legislation, E. H. Youngman, editor of the *Bankers Magazine*, writes:

I agree with you entirely that centralization of banking power is not a desirable thing, and I am sure that the bill now pending in Congress provides for such centralization in a form that I believe to be highly objectionable. I also agree with you thoroughly that the most sensible plan would be to utilize the clearing-house machinery instead of setting up a new form of organization.

An exposition by Mr. Youngman of his views on the clearing-house appeared in the August issue of his magazine. It is so clear and so practical in its recommendations that it is reprinted on another page of this issue. Its dominant thought is the utilization of existing machinery rather than the creation of new machinery for our financial system.

New England, through the Boston clearing-house, is demonstrating the utility, the economy and the facility of the regional clearing-house system, although hampered, as it is, by outgrown laws originating in the character of deliberate monopoly given the National bank system in the exigencies of a war. Canada is demonstrating the advantages of the safety and the freedom and the sound economics of New England banking before the Suffolk system was suppressed by the National bank monopoly fifty years ago. The Chicago clearing-house is demonstrating the practices that should be included in any system of regional clearing-houses.

There is no essential feature of strength in present National banking that was not foreshadowed in State banking before the war or that cannot easily be added to a system based upon the regional clearing-house. The monopolistic feature of the National banking system has outlived its reason and its value even to National banks. Its habit, though, is responsible for the failure of many minds sincerely desirous of a reformation to get away from the thought that some sort of partnership between Government and banks is necessary, a thought running to two extremes, control of Government by finance and control of finance by Government, both equally pernicious.

The habit is akin to that which dominates so much unsuccessful invention of a fundamental kind. Hardly any invention that has added materially to the equipment of mankind for world-tasks has become a commercial proposition without breaking away



from attempts to modify manual movements into mechanical. It has been so with the printing press, with harvesting machinery and with type setting. The misnomer in the last-mentioned is a record of the process itself. The earlier inventions were but attempts to make a machine that would set type, a mere substitution of the machine for the hand. The great success came when men were able to dismiss the hand from their minds and to produce a combination of the type-writer keyboard and stereotyping in a type-casting machine, producing a solid line of type.

So, too, as to banking. The obsession growing out of fifty years of a special type of banking in an unsystem of banking ought to be avoided in plans to give the country a banking system adequate to present needs and containing the qualities that will permit it to keep pace with the growth of the country's business and to aid that growth. The plan should emphasize natural development along lines of least resistance instead of cultivating artificial devices. The clearing-house is right at hand, a natural evolution, in spite of its handicap of illegality. It has proved its worth. Why not base a banking system upon it, with the Federal Government as the policeman only?

INDUSTRIAL ACTIVITIES SOUTH.

During August the Construction Department of the MANUFACTURERS RECORD published 4494 items relative to Southern industrial, financial, railroad and general business interests. Within the preceding seven months—from January to July, inclusive—37,925 similar items were published, making a total, up to September, of 41,819 items.

Under their various headings, the August items are summarized in the following table:

Industrial and Developmental.	
Bridges, Culverts, Viaducts.....	65
Canning and Packing Plants.....	23
Clayworking Plants.....	18
Coal Mines and Coke Ovens.....	3
Concrete and Cement Plants.....	1
Cotton Compresses and Gins.....	45
Cottonseed-oil Mills.....	21
Drainage and Irrigation.....	29
Electric Plants.....	77
Fertilizer Factories.....	14
Flour, Feed and Meal Mills.....	28
Foundry and Machine Plants.....	33
Gas and Oil Enterprises.....	113
Ice and Cold-storage Plants.....	43
Iron and Steel Plants.....	42
Land Developments.....	103
Lumber Manufacturing.....	75
Metal-working Plants.....	5
Mining.....	51
Miscellaneous Construction.....	83
Miscellaneous Enterprises.....	102
Miscellaneous Factories.....	164
Motors and Garages.....	45
Railway Shops, Terminals, Round-houses, etc.....	10
Road and Street Work.....	203
Sewer Construction.....	82
Telephone Systems.....	13
Textile Mills.....	25
Water-power Developments.....	6
Water-works.....	115
Woodworking Plants.....	43
Buildings.	
Apartment-houses.....	106
Association and Fraternal.....	42
Bank and Office.....	91
Churches.....	96
City and County.....	75
Courthouses.....	34
Dwellings.....	432
Government and State.....	23
Hotels.....	51
Miscellaneous.....	99
Railway Stations, Sheds, etc.....	35
Schools.....	173
Stores.....	211
Theaters.....	15
Warehouses.....	70
Railroad Construction.	
Railways.....	151
Street Railways.....	28
Financial.	
Corporations.....	114
New Securities.....	340
3,864	
Burned, etc.....	153
Machinery, Proposals and Supplies Wanted.....	477
Total for August.....	4,494
Previously detailed.....	37,325
Total to September.....	41,819

INCREASE IN SOUTHERN TAXABLE VALUES.

The steady increase in the assessed value of property in Southern States which has been noted in recent years is maintained this year.. Among the State assessments already announced are \$867,598,725 in Georgia, an increase over 1912 of \$25,240,383; \$578,933,718 in Louisiana, an increase of \$28,415,910; \$1,756,476,154 in Missouri, an increase of \$20,804,545, and \$1,245,000,000 in West Virginia, an increase of \$77,000,000.

THE COMMERCIAL COTTON CROP.

According to Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, the commercial cotton crop in the year ended August 31 was 14,167,115 bales, a decrease of 1,917,311 bales under the preceding year.

Texas Coal in 1912.

The production of coal in Texas in 1912 passed the 2,000,000-ton mark, with a value at the mines of \$3,655,744. These figures are record-breakers for the State.

The coals of Texas occur in three of the geologic systems, the Carboniferous, the Cretaceous and the Tertiary. The Carboniferous coals are bituminous in character and are found in the north-central part of the State, in an area covering approximately 11,000 square miles. The productive portion is confined to the central part of the field. The principal mining operations are in Eastland, Palo Pinto, Erath, Wise and Young counties. The Cretaceous coals occur in the southern part of the State, and are mined near Eagle Pass, in Maverick county. These are also classed as bituminous coals. Lignite beds of Tertiary age extend entirely across the State from the eastern boundary at Sabine River in a south-westerly direction to the Rio Grande. In the southwestern extremity, near Laredo, in Webb county, the lignite merges into a coal of higher grade, and the Webb county production is classed as bituminous. The development of the lignite resources of Texas began in the last decade of the last century, and the advent of the gas producer, in which lignite is found to serve excellently, is giving a further impetus to production. The output of lignite in 1912 reached nearly 1,000,000 tons. The number of men employed in the coal and lignite mines of Texas in 1912 was 5127, who worked an average of 230 days, against 5353 men for an average of 226 days in 1911. The general average production per man was 427 tons for the year and 1.86 tons per day in 1912, against 369 tons and 1.63 tons, respectively, in 1911.

There were only two fatal accidents at the coal or lignite mines of Texas in 1912, one man being killed in a shaft and one on the surface.

For \$500,000 Drainage Canal.

The State of Florida has awarded contract for continuing to completion the construction of the West Palm Beach drainage canal, estimated to cost \$500,000. Ben Johnson & Co. of Miami, Fla., and the Furst-Clark Construction Co. of Baltimore and other cities have the contract. This canal will afford continuous open water from Lake Okeechobee to Lake Worth and West Palm Beach, Johnson & Co. undertaking the work from Lake Worth to the glades west of Lake Clark and Furst-Clark from Lake Clark to Lake Okeechobee. It will be 42 miles long, 80 to 100 feet wide at the top and will have a depth of from 9 to 10 feet, requiring the dredging of 6,000,000 cubic yards of materials.

# Need of Clear Thinking in Efforts to Overcome the Confusion of the Income Tax Measure.

The need of clear thinking in efforts to make the national income tax measure a workable proposition was emphasized in the beginning of the debate in the Senate of that feature of the tariff bill. When the income tax section was reached there was presented to the Senate a memorandum, rather singular considering all the circumstances, if not unprecedented in legislation, written by Congressman Hull of Tennessee, described as "for the major part the draftsman of the income tax provision as it left the House," and containing the following statements:

The proposed measure would require no act of the citizen until the first of January next. It would assess and collect a tax off the individual during the next year.

An income tax is assessed and collected during the year subsequent to the accrual of the income returned and by which the tax is measured.

The power to impose the tax has existed during the entire year.

This memorandum, together with opinions furnished by Senator Shields of Tennessee and by an assistant to the Attorney-General, bore upon an effort on the part of Senator Root to remedy the defect in the measure, the attempt to make effective the law for a period antecedent to the date of its enactment. The question of the constitutionality of such a provision must come for final decision before the United States Supreme Court. So it is probably a useless expenditure of time and an influence to greater confusion to consider it at present, in the face of an apparent determination on the part of the dominant element in the Congress to ignore it. But the quotations from the "memorandum" of Congressman Hull are reinforcement of his apparent inability, manifested strongly in his exposition of his measure in the House of Representatives, to get at the essence of reasonable objections to it or to grasp the scope of the language in which it is framed.

Differing from his impressions that the measure would require no act of the citizen until January, 1914; that it would assess and collect a tax off the individual during the next year, and that an income tax is assessed and collected during the year subsequent to the accrual of the income are the following provisions of the income tax section as it was reported by the Senate finance committee:

For the year ending December 31st, 1913, said tax shall be computed on the net income accruing from March 1st to December 31st, 1913, both dates inclusive, after deducting five-sixths only of the specific exemptions and deductions herein provided for.—Page 172.

All persons, firms, co-partnerships, companies, corporations, joint stock companies or associations, and insurance companies, in whatever capacity acting, including mortgages of real or personal property, trustees acting in any trust capacity, executors, administrators, agents, receivers, conservators, employers, and all officers and employees of the United States having control, receipt, custody, disposal, or payment of interest, rent, salaries, wages, premiums, annuities, compensation, remuneration, emoluments, or other fixed or determinable annual gains, profits, and income of another person exceeding \$3000 for any taxable year, other than dividends on capital stock, or from the net earnings of corporations and joint stock companies or associations subject to like tax, who are required to make and render a return in behalf of another, as provided herein, to the collector of his, her or its district, are hereby authorized and required to deduct

and withhold from such annual gains, profits, and income such sum as will be sufficient to pay the normal tax imposed thereon by this section, and shall pay to the officer of the United States Government authorized to receive the same; and they are each hereby made personally liable for such tax.—Page 178.

That in computing net income for the purpose of the normal tax there shall be allowed as deductions \* \* \* the amount of income, the tax upon which has been paid or withheld from payment at the source, under the provisions of this section.—Page 170.

All persons, firms, companies, co-partnerships, corporations, joint stock companies or associations, and insurance companies \* \* \* having the control, receipt, disposal or payment of fixed or determinable annual or periodical gains, profits, and income of another person, subject to tax, shall in behalf of such person deduct and withhold from the payment an amount equivalent to the normal income tax upon the same and make and render a return.—Page 174.

Any person for whom return has been made and the tax paid, or to be paid as aforesaid, shall not be required to make a return unless such person has other net income.—Page 175.

The person required to withhold the tax and pay it to the Government.—Page 180.

Where under the terms entered into before this act takes effect the payment to which the taxable person is entitled is required to be made without any deduction by reason of any tax imposed, the obligor shall not be compelled to make such deduction or withhold the income tax, but shall give notice to the collector of the payment made, or to be made, as part of the return which he is required to make.—Page 180.

The amount of the normal tax herein before imposed shall be deducted and withheld from fixed and determinable annual gains, profits, and income derived from interest upon bonds, and mortgages, or deeds of trust, or other obligations of corporations, joint stock companies or associations, insurance companies, whether payable annually or at shorter or longer periods, although such interest does not amount to \$3000, subject to the provisions of this section requiring the tax to be withheld at the source and deducted from annual income and paid to the Government.—Page 181.

These provisions deal with the fundamental principle in the income tax measure, and, under the remarkable handling of it in practice, the fundamental root of almost incurable confusion in it, payment of the income tax at the source of the income wherever any part of the income is greater than \$3000.

They distinctly do not contemplate non-action until the first of next January. They iterate the compulsion, under personal liability for the tax, upon any source of any payment over \$3000 to a taxable to withhold from such payment the sum required for the tax and to pay that tax direct to the Government. The compulsion is mentioned in the present, past and future tenses, so that there is no possibility that ordinary intelligence can mistake its meaning and its intent.

Yet, Congressman Hull still imagines that the income tax is assessed and collected during the year subsequent to the accrual of the income. The measure of which he "was for the major part the draftsman" compels the source of any payment in the nature of gain, profit and income over \$3000, to act virtually as collector of the income tax as the payment is made, to withhold for payment to the Government of an amount equal to the tax on that much income.

To illustrate: A has in his employ B

at a salary of \$4000 a year, payable monthly. Under the income tax measure, as it stands today, A is personally liable to the Government for \$10, the 1 per cent. tax on the \$1000 over the \$3000 of the salary exempt. To rid himself of the personal liability, A must withhold from his monthly payments to B 83 1/3 cents, to be paid by him to the proper Government official at some time, not specified, by the way, in the measure, but, probably and inferentially, by June 30 in the following year.

The impracticability of this provision, even granted that it would stand the test of a fearless court acquainted with elemental law, is indicated by the fact that since March 1, 1913, at which date the measure, still unenacted, is to take effect, A has paid B the full amount of six months' salary, and that, therefore, it is physically impossible for him to withhold the amount of the income tax from the payment. As a matter of fact, the average A will not undertake to withhold any part of B's salary on account of the tax until a law has been passed compelling him to do so, and the power to pass a law does not make law. The power must be exercised in accordance with the Constitution, which automatically nullifies any law of ex post facto character.

Hence, Congressman Hull's statement that "the power to impose the tax has existed during the entire year" has no bearing upon the question. The power to impose the tax does not become effective, in accordance with law and the Constitution, until the Congress has enacted a law imposing the tax. That principle is within the comprehension of a high-school boy.

Another illustration of the impasse in attempting to collect the income tax at the source of the income before a law to that end has been enacted is given in connection with the special provision affecting incomes in the shape of interest upon bonds. Here the tax must, according to the Hull measure, be paid, whether the interest from the bonds amounts to \$1 or \$10,000, and paid by the owner of the interest. Corporation C has issued \$10,000,000 of coupon bonds, unregistered. These have been sold and resold. The corporation has no record of their ownership. It is obliged to redeem with cash the coupons as they come in at periodic intervals from bankers and brokers who have credited them to the accounts of their customers owning the bonds. By January 1, 1914, and, indeed, by the time the pending measure becomes law, practically all the coupons will have been redeemed by the corporation and the owners of the bonds will have received their interest in full.

How can Corporation C withhold from payment of interest that has been paid in full any part to meet the income tax on that interest, yet a tax, nevertheless, for which it is personally liable? How can Corporation C withhold, under any circumstances, any part of the payment of the interest represented by coupons the ownership of which is unknown to it?

The difficulties in the physical prohibition of withholding the amount of the tax from payments already made before the tax has been imposed, here indicated in their simplest form, become greater when considered in connection with the requirement of such withholding from any form of income over \$3000—with few exceptions—and in connection with the definition of an income in the measure as follows:

Subject only to such exemptions and deductions as are hereinafter allowed, the net income of a taxable person shall include gains, profits, and income derived from salaries, wages, or compensation for personal service of whatever kind and in whatever form paid, or from professions, vocations,

businesses, trade, commerce, or sales or dealings in property, whether real or personal, growing out of the ownership or use of or interest in real or personal property, also from interest, rent, dividends, securities, or the transaction of any lawful business carried on for gain or profit, or gains or profits and income derived from any source whatever, including the income from but not the value of property acquired by gift, bequest, devise or descent.—Page 167.

Wherever such gains, profits or incomes amount to more than \$3000 from any one source, that source must withhold from such gains, profits or incomes an amount equal to the tax, beginning with March 1, 1913, already six months past, according to the bill as amended by the Senate Finance Committee, which has an utter impossibility. Furthermore, the attempt to impose that impossibility is predicated upon the possibility that income derived from "salaries, wages, compensation for personal service of whatever kind" and income derived from "sales or dealings in property, whether real or personal," may be interpreted in exactly different ways.

More than four months ago the MANUFACTURERS RECORD suggested changes in the income tax measure to overcome the impossibility which has here been reviewed, and it has continued to urge the change ever since. But not until August 28, after the bill had passed the House of Representatives, been referred to the Senate finance committee, been threshed out in the Democratic caucus and was again before the Senate as a matter of form, did Senator Williams, in charge of the income tax section, offer as an amendment "to cure," as he said, "an oversight in the bill," the following, absolutely sustaining the four months' contention:

Provided, That the provision requiring the normal tax of individuals to be withheld at the source of the income shall not be construed to require any such tax to be withheld prior to the date of the passage of this act.

The income tax section of the tariff bill is largely an aggregation of oversights.

Other difficulties might be mentioned, as, for example, the complexities introduced for the sources of payment of incomes by the addition, on page 171, to the \$3000 exemption from the income tax of \$1000 in the case of a married person and of \$500 in the case of each minor child of such person, up to two children, to which no allusion is made in other paragraphs of the measure. But the simple proposition, as stated, emphasized as it has been by the eleventh-hour amendment "to cure an oversight," ought to suffice to convince legislators who desire an income tax that can be enforced of the necessity for disregarding entirely the measure as it came, with all its imperfections of English language, thought, law and constitutionality from the House of Representatives, and, instead of adding to its difficulties by efforts to patch it up, for recommitting the bill to the Senate finance committee and, by way of amendment framing an income tax measure from the ground up. That task will be simplified if certain principles be adhered to, to wit:

No lobbying by members of one branch of Congress for or against action upon the measure by the other branch.

Substitution of information by the source of income for payment by the source.

A flat tax upon all net incomes, great or small, yielding in the tax an amount greater than the cost of collecting the tax.

Clear distinction between the ideas, income and capital, and the words, exemption, exception and deduction.

Giving the law effect from the date of its passage.

Careful watch upon developments in

the conference committee to which the bill will probably be sent.

Observance of such principles will not only expedite the legislation, but will result in a law approaching workability, constitutionality and justice and making possible the end sought, revenue for the Government.

### CUSHING OIL FIELD.

Recent Developments in Oklahoma's Latest Producing Region.

[Special Cor. Manufacturers Record.]

Cushing, Okla., August 30.

The Cushing oil and gas field, one of the youngest oil producers in Oklahoma, yields the valuable stuffs with a vim at the rate of 25,000 barrels of oil a day. Of the 800 drilled wells, only 9 proved to be "dry holes." The 28 gas wells produce much more gas than can be or is utilized. Gas experts say that the wells could be developed to yield 2,000,000,000 feet every day.

The workers in the Cushing oil field are fortunate in having an abundance of water. The 300 drilled water wells supply all the men, animals and machines in the 10-mile long field with plenty of good water. Water pipes run in every direction, and overflowing water tanks can be seen near every derrick.

Seven pipe lines connect the Cushing oil pumping stations with the refineries in this town and with refineries in several States. Those who know predict that the Cushing field will have 3000 producing wells by January 1, 1914.

Materials for 20 derricks are now being hauled round about the recently-discovered Milliken oil pool, three miles northeast from here. The Milliken oil, which is of a greenish color, is said to be the best coal oil so far found in Oklahoma. Four deep and spacious wells in the nearby Cimarron River bottom help to supply this city and the refineries with all the needed water.

Cushing's new schoolhouse, which is a masterpiece of masonry, is nearly completed. A steel bridge over the Cimarron, four miles north of this city, will no doubt be erected next fall.

At least 100 additional dwelling-houses will be needed in Cushing next winter, owing to the fact that many families will remove from their camps in the oil field for the purpose of having the children schooled in Cushing. The Santa Fe and Missouri, Kansas & Texas railroad companies are having still more side-tracks built here.

MATT DUHR.

### The Birmingham Iron Market.

[Special Cor. Manufacturers Record.]

Birmingham, Ala., August 30.

Inquiries received and the actual tonnage booked during the week that has just closed have both been more or less of a nominal nature. There has nothing transpired, however, that has in the least tended to weaken the market. This could hardly be expected, from the fact that producers have already comfortably taken care of themselves for the balance of this year so far as the bulk of their tonnage is concerned. This does not mean that producers have sold up solidly their anticipated fourth quarter make. It is not considered a good selling policy to do this, but rather reserve a certain tonnage for speculation. That is, a fair tonnage of free iron to take advantage of spot business and any advance in the market that might come. However, it can safely be said that the large producers have a big "back-log" on which they can rely. The aggregate tonnage booked during the week will total 20,000 to 25,000 tons. This is certain, and quite a few large tonnage

lots are heard of, but confirmation at this time cannot be had of such sales. There has also been quite a little tonnage booked of special grade iron, which iron commands and brings from \$1 to \$1.50 per ton premium over standard Alabama iron. The bulk of the tonnage is for movement in the far West, where it is used as a heavy scrap carrier, and for heavy and intricate work, such as oil, ammonia and steam cylinders, etc. The price of \$11 per ton at the furnace for standard Alabama iron has been firmly established, and some scattering lots have been booked at \$11.25 per ton at the furnace. As yet none of the furnace companies have opened their books for next year's delivery. There is a more or less "waiting game" being played, and while producers do not hope or look for a run-away market, there are some signs that point to a substantial buying movement in the near future. The demand for charcoal iron is also on the upgrade. The furnace of the Shelby Iron Co. at Shelby, Ala., was put back in blast during the past week, after having been out for some time for needed repairs. While the stock figures for the month just closing have not yet been compiled, there is every reason to believe that a substantial decrease will be shown over last month. The furnace stacks that have gone out of commission the past three or four months show no signs of activity within the near future; so that feature, added to the decreased stock figures, denote that production is nearing the consumption mark. The following table of prices continue to govern the Southern market:

No. 1 foundry, \$11.50.  
No. 2 foundry, \$11.  
No. 3 foundry, \$10.50.  
No. 4 foundry, \$10.  
Gray forge, \$10.  
Mottled, \$9.75.  
Standard basic, \$11.  
Off basic, \$10.50.

The recent purchase of basic iron by the steel corporation has stimulated the basic market in the South somewhat, but prices on that grade have not advanced.

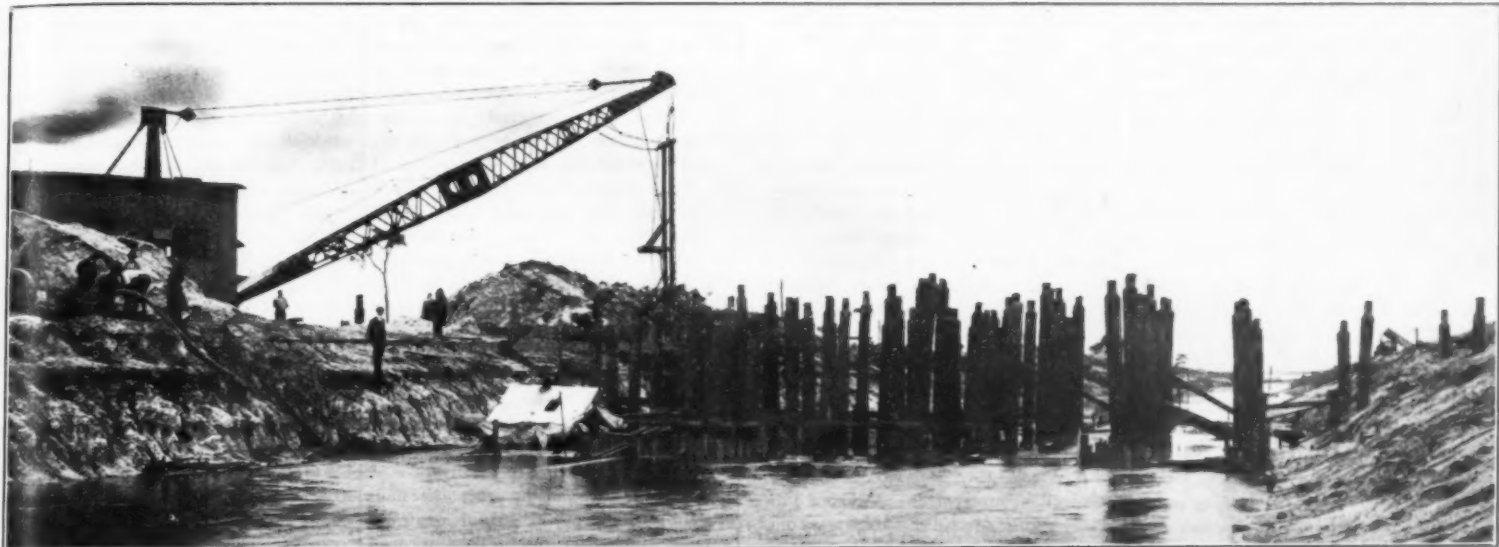
The cast-iron pipe market has shown no marked improvement, and the plants of the district are running on from one-half to three-quarter force. While producers state that they are getting their share of the business, yet there is comparatively little business offering. Following are quotations per net ton f. o. b. cars Birmingham, viz.: Four-inch, \$22; six-inch and eight-inch, \$20.50, with an average of \$20 per ton for the larger sizes. Class "A," or gas pipe, is quoted at an advance of \$1 per ton over that asked for class "B."

There has not been a time in the history of Alabama coal and coke production when the prices of coal and coke have held up so well during the summer season, except during the Western strikes a few years ago, at which time the Western roads came to Alabama for their coal supply. Washed slack coking coal is selling as high as \$1.25 per ton at the mines, and standard Alabama foundry coke as high as \$3.75 to \$4 per ton at the ovens.

The election of Mr. Frank S. Washburn of Nashville, Tenn., as president of the Alabama Power Co. and Mr. J. W. Worthington of Sheffield, Ala., as vice-president puts at the head of this large corporation Southern men who understand Southern conditions, and will be able to conduct the affairs of the company in Alabama from the standpoint of Southerners. This is only an emulation of the policy of the Steel Corporation in wisely and sagaciously dealing with an economic question.



PHASES OF LAND RECLAMATION IN FLORIDA.



SINKING PILES FOR CONCRETE GATES, MAIN OUTLET CANAL, FELLISMERE FARMS, ST. LUCIE COUNTY.



ROCK CRUSHER ON ROAD WORK IN BREVARD COUNTY.



DRAW LINE EXCAVATORS MAKING DRAINAGE CANAL.



MAIN CANAL, INDIAN RIVER FARMS.

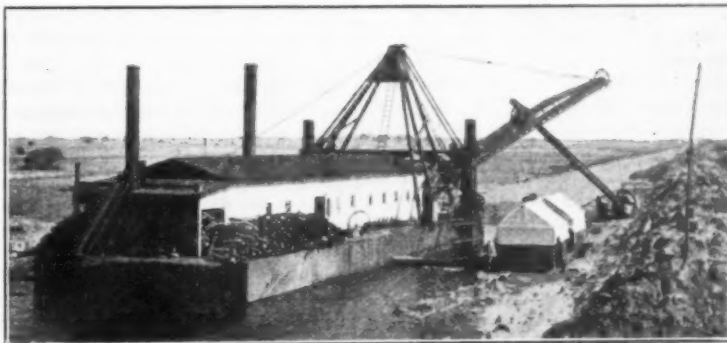


OUTLET CANAL, THROUGH ROCK, TITUSVILLE.

DRAINING THE EVERGLADES.

Present Status of the Important Reclamation Project in Florida.

The vast amount of dredging that has been done in the Florida Everglades drainage project has now brought about conditions under which decided progress is being made in bringing the rich lands along the canals under cultivation. President Frank A. Furst of the Furst-Clark Construction Co., Fidelity Building, Baltimore, has just returned from an inspection of his company's dredging operations between Lake Okeechobee and the Atlantic coast. He is enthusiastic over the prospects of future development and the



RECLAIMING EAST COAST PRAIRIE LAND, ST. LUCIE COUNTY.

wonderfully productive powers of the soil and climate as already shown in the experimental 12,000-acre Davie farm six miles up the canal from Fort Lauderdale. In discussing the work done there by his company and that yet to be done, Mr. Furst in an interview with the MANUFACTURERS RECORD made some striking statements:

"I have been down there many times," he said, "and have spent considerable time in looking over the country and the dredging work. I found the climate cooler on the present trip than it was farther North. The thermometer on one of our dredges showed 88 degrees, when it was way up in the nineties in the more North-

ern States. The breezes from ocean or gulf reach to Lake Okeechobee, and are nearly always in evidence.

"I was very much impressed with the crops raised on the great Davie farm; sweet potatoes as big as a man's head and over a foot long, and other crops to match. It was remarkable, indeed, and it seems to me that the richness of the soil should continue indefinitely, it is so deep and fertile. It looks as if nearly everything that can be raised anywhere will grow there in large quantities per acre.

"We have about finished up the big contracts for the Miami canal from Miami to Lake Okeechobee, the North Canal and the South Canal. They have been cut through, and only need cleaning up to proper uniform depth in some places and finishing off. The Hillsboro Canal is within two miles of the lake now, and is progressing well. A twice-a-week steamer line runs from Fort Lauderdale, on the Atlantic side, through the canal. Lake Okeechobee, the Caloosahatchie River and the old Diston Canal to Fort Myers, on the Gulf side of Florida.

"The Miami Canal is 70 miles long from Miami to Lake Okeechobee; it is 8 to 10 feet deep and 50 feet wide at the bottom; the North Canal from Fort Lauderdale to the lake is 68 miles long, and the South Canal from Fort Lauderdale to the Miami Canal, cutting into it some distance below the lake, is 40 miles long. The lake surface is 21 feet above sea level, so that the water flows from the lake. The canals form not only a drainage system, but may be used for irrigation if necessary. The land is nearly level, and covered with saw grass. One object of the canals is to lower the water of the lake by four feet, so that these level lands will not be overflowed from the lake. The land must be further drained by means of lateral drainage ditches leading across the farms to the canals. This is done by the owners and not by the State.

"It is difficult to forecast the development that may be brought about by this drainage system. The land is wonderfully fertile, and the Davie farm shows that immense crops may be raised. The position of the land with relation to the canals and means of travel is important, and anyone buying there should see the land and look into its accessibility from the canal or by private drainage developments.

"We have just been awarded the contract by the State to complete the upper end of Palm Beach Canal between West Palm Beach and Lake Okeechobee. This involves the removal of 3,000,000 cubic yards of material.

"The whole system of canals will drain the immense area of 170 miles by 70 miles, the farms to be further drained by private drainage ditches."

Mr. Furst believes that the developments will be carried still farther by private enterprise, large companies and transportation agencies; also that bonds for completing the State plans will be issued by the State when the commission which has engaged the engineering firm of J. G. White & Co. of New York to fully investigate and report the engineering, industrial and other features of the whole subject of drainage and possible development of the lands under consideration, makes its report. The report of this company and the State Commission will be awaited with interest.

The agricultural department of the Central of Georgia Railway is circulating a pamphlet describing the working out of the farm settlement plan in co-operation with the Chamber of Commerce of Albany, Ga

## ALABAMA POWER COMPANY.

### Merges With Four Corporations It Controls—Will Continue Big Hydro-Electric Developments.

The Alabama Power Co., Birmingham, has merged with the Alabama Electric Co., the Wetumpka Power Co., the Alabama Power & Electric Co. and the Alabama Power Development Co., with capital stock of \$20,000,000 and bond issue of \$20,000,000. The Alabama Power Co.'s development at Lock 12 on Coosa River is rapidly progressing and will furnish 105,000 horse-power, the four companies merged owning other undeveloped Coosa River power sites and all five companies having been under the management of the Alabama Traction, Light & Power Co., Ltd., James Mitchell of London, president. Future plans involve developments totaling more than 400,000 horse-power and W. W. Freeman, vice-president and general manager of the Alabama Power Co., recently advised the MANUFACTURERS RECORD that ultimate plans include constructing eleven dams for generating 1,227,000 horse-power for electrical transmission when the Government completes storage reservoirs it contemplates.

Relative to this merger, the Alabama Power Co. wires the MANUFACTURERS RECORD confirming the following statement:

"We have filed with Alabama Secretary of State a joint agreement prescribing the terms of the merger of the four companies into the Alabama Power Co. The Alabama Power Development Co. owned a small hydro-electric plant in Talladega county, from which it served the city of Gadsden. These companies have, since the early part of last year, been under the management of the Alabama Traction, Light & Power Co., Ltd. The joint agreement authorizes the Alabama Power Co. to issue bonds to the extent of \$20,000,000, secured by a mortgage on its properties. A large amount of money has been secured by this and the other companies in the merger through the same financial interests, and part of the funds thus obtained will be secured by the bonds under this mortgage, as usual with such developments."

The agreement of merger of the five companies is dated July 28. The stock of the Alabama Power Co. is divided into 200,000 shares at \$100 each. The Alabama Power Co. holds 70,000 shares, the Alabama Electric Co. 20,000, the Wetumpka Power Co. 7500, the Alabama Power & Electric Co. 250 and the Alabama Power Development Co. 2000. The officers are James Mitchell, president; W. W. Freeman, vice-president and general manager; Walter M. Hood, secretary; Fred S. Ruth, New York, treasurer. The directors are James Mitchell, W. W. Freeman and Thomas W. Martin.

The directors have accepted the resignation of Mr. Mitchell as president and elected Frank S. Washburn of Nashville to fill his unexpired term. J. W. Worthington of Sheffield was elected a vice-president. These changes were made in order to secure closer and more nearly continuous direction of the company's management, affairs and policies than would otherwise be possible, now that Mr. Mitchell's presence in connection with this company and other interests is required almost continuously in New York and London.

Referring to new officers chosen for the company and the latter's plans for the future, official announcement was made at Birmingham as follows:

"The main policies of the company are in no wise altered by these changes. The

necessary plan and purpose of the company to generate and sell hydro-electric power on a large scale in large blocks, in addition to the small consumer, marks the only sort of development that could have any profoundly beneficial effect on Alabama's industrial growth. The future of Alabama, and particularly of the Birmingham district, will be measured by the extent to which the natural resources of the State are developed and its natural advantages made available. No power company with the purposes and plans of the Alabama Power Co. can prosper unless it succeeds in bringing into the field of its operations great power-using industries. Experience has shown that in most cases such industries have not previously found a place in this section, and never could be established except with the guarantee of a plentiful supply of power over long periods and at low cost. An example of such industries is the fixation of atmospheric nitrogen, the production finding its principal use at present as an agricultural fertilizer, but promising even more important application in the arts for the manufacture of nitric acid, cyanides for ore reduction and ammonia for a variety of purposes. Though this industry is entirely new, it already employs in Europe, Japan and Canada 300,000 horse-power. The cyanide industry is fast increasing yearly, and plans are projected by one of the companies engaged in this industry for the use of 1,000,000 horse-power in addition to present requirements of that company in the course of the next five years.

"Mr. Washburn is president of the American Cyanide Co., which has the manufacturing rights in the United States and Canada, and is now engaged in the fixation of atmospheric nitrogen at its large and constantly-growing works at Niagara Falls. It will be recalled that this company contracted with the Alabama Power Co. last year for establishing a plant in Alabama and using power from a projected development on the Coosa River at the proposed site of Lock 18. This development would have been in addition to the hydro-electric works now under construction at Lock 12, and equal in extent thereto. Favorable Congressional action approving construction of the dam was vetoed by President Taft, with the result that the State lost an investment within its borders of \$3,000,000 devoted to the production of a cheap agricultural fertilizer, and Canada reaped the benefit by an increase to the cyanide company's plant there.

"Another example is the electric steel furnace. The hydro-electric developments of the Alabama Power Co. will open a field for electric furnaces in the iron and steel industry in the Birmingham district of the greatest economic importance. Like all electro-chemical and electro-metallurgical processes and undertakings, the development of the electric steel furnace are known to few. Faster and faster the electric steel furnace is extending its influence in foundry practice, and its evolution has been hastened by the possibility and ease of turning out a high quality of steel at a cost much lower than with the crucible process. In industrial countries the electric steel furnace is daily gaining importance, for it is proving that with its use higher quality steel can be produced from cheap, impure raw materials equal to crucible steel. The inherent natural handicap of high sulphur and high phosphorus in Alabama from ores is completely overcome and solved by the electric steel furnaces. The Alabama Power Co. hopes and believes that its hydro-electric developments in Alabama will bring to the production of iron and steel by the use of the electric steel fur-

nace a new impulse. The developments of the water-powers in the navigable streams of the State of Alabama will open the way for electro-chemical and electro-metallurgical industries, and the establishment of those industries means the prosperity of Alabama in the broadest sense, and it is only by fostering the establishment of such industries in Alabama that the purpose and plans of the Alabama Power Co. can be profitably carried out. The Alabama Power Co., in carrying out its purposes and plans, will not, at any time, forget that it is a public utility corporation, with recognized duties to the public, and hopes in the discharge of these duties it will enjoy the support and patience of the public and the press."

Last year the Alabama Interstate Power Co., controlled by Alabama Traction, Light & Power Co., capitalization \$55,000,000, began work on the Lock 12 hydro-electric plant. This development requires a dam 1550 feet long and 85 feet high, impounding 8,000,000,000 cubic feet of water, area of lake created by dam being 6000 acres and watershed above dam being 9100 square miles. Turbines will be installed with capacity of 105,000 horse-power and generating 65,000 kilowatts for transmission at 110,000 volts to reducing stations for distribution. This plant is about 47 miles from Birmingham, about 47 miles from Montgomery and about 20 miles from Ocmulgee, on the Louisville & Nashville Railroad, and its electricity will be transmitted throughout territory indicated. After completing this development the company will give consideration to developing its additional water-powers. The parent company of the developments is the Southern States Securities Co., Ltd., London, England, Lawrence Macfarlane of Montreal being president. He is also vice-president of the Alabama Interstate Power Co., while James Mitchell (representing Sperling & Co. of New York and London) is president of the Alabama Traction, Light & Power Co. The capital of the parent and subsidiary companies is being furnished by Canadian and English bankers.

### Denison Improvements.

Chamber of Commerce,

Denison, Tex., August 23.

#### Editor Manufacturers Record:

With bountiful crops throughout North Texas and Southern Oklahoma, this section was never in better condition. The country is fast developing its resources and constructing improved highways. In the Denison district the 60 miles of macadam roads are being oiled to prevent disintegration and solve the dust problem. Denison is keeping abreast of this section in the way of development, and at present improvements contracted for and under construction exceed \$450,000.

W. N. KING, Secretary.

### To Develop 65,000 Horse-Power.

The Hydro-Electric Company of West Virginia, W. S. Kuhn, president, Pittsburgh, has preliminary plans for the construction of a dam and power-house on Big Sandy Creek, near Rockville, W. Va. This dam is to be 1600 feet long and 200 feet high, while the power-house will be 100 feet long by 60 feet wide. Water will be conveyed to the turbines through a concrete-lined tunnel 9 feet in diameter, three water turbines to be included in the equipment and 65,000 electrical horse-power to be generated. This plant is estimated to cost \$5,000,000.

The Lydia Cotton Mills, Clinton, S. C., will add six spinning frames, and has awarded the contract for this machinery.



# Southern Men in Building Up the South

By ALBERT PHENIS.

In the industrial, commercial and financial development of the South, the part played by men of the South in devising big undertakings, working them out and putting them into operation is hardly understood by the country at large, wherein there lingers yet the fallacy that the big growing communities of the South and the important enterprises there generally owe their initiative and their robustness to the inspiration and energy of some man or men from a section elsewhere. As a matter of fact, since the early settlement of the colonies there never has been a development in any part of the country where so much has been done by the people "to the manner born" as in the South. All the West, from the Alleghenies to the Pacific Ocean, was built up by immigrants and incomers, while all the enormous work of rehabilitating and rebuilding the desolate South—work in many respects more difficult, burdensome and costly than the settling up of the unpeopled lands of the West—fell on the shoulders of the people of the South, and from then to this day they and their sons have been and are found everywhere in the forefront of development work of every sort.

Therefore, when attention is called to the achievement of some particular Southern man, it is not in the way of heralding a phenomenon, but merely to give recognition to a work well done—to give a specific illustration of the fact that Southern people do big things of their own accord, and are doing them everywhere all over the South. It is useful for the world at large to see on the screen at times a picture of what the Southern man in action can achieve.

Down in Texas the Eastern Texas Traction Co. is building a line from Dallas to Bonham, 91 miles. That portion between Dallas and Greenville, 54 miles, is over 90 per cent. completed, and will be in operation before very long. The line from Greenville on to Bonham will be taken up next and completed at an early date. This is an important accession to the list of such roads which is making Dallas the greatest interurban center southwest of Indianapolis, and one of the greatest the country contains. Something less than 400 miles of interurban roads radiate from Dallas in six directions, and lines under construction or in promotion stage will greatly increase this mileage—well-nigh double it, in fact, if all the various lines chartered and canvassed for are to be built. The Eastern Texas Traction road runs through a remarkably rich section of Texas, the very cream of the famous black lands, it has been said. So well settled is the territory that from 15 to 30 farmhouses can be counted from any point on the line, and the report of engineers is that there is not a mile of the road that will not be self-sustaining. It is believed that hardly as much can be claimed for any other interurban road in the country.

The road is being built differently and will be run differently from most other interurban lines. With concrete culverts and bridges, there is standard roadbed and equipment, and from an engineering standpoint everything is of the best. Service to the public is the great aim, and the prevention of accidents is considered of the highest importance. So there will be three systems of dispatching—telephone, telegraph and block signals. Two hundred feet before reaching a crossing a car

will automatically ring warning bells at the crossing, and at night there also will be red lights.

Agricultural, industrial and commercial departments, each in an expert's hands, will co-operate in every way to build the territory up. Intensive farming, dairying, trucking will be fostered, and agents will assist producers in finding profitable markets. All way station platforms will be carload high, so the farmers may conveniently load and unload.

Country merchants and their customers will be served in a unique manner. Every car will carry express packages. A private telephone line will be installed for the benefit of country merchants, who can order anything by catalogue number from any Dallas jobber, and deliveries will be made in two or three hours, a special agent of the traction line being at the station in Dallas, whose duties are to expedite deliveries of orders of this kind. The country customer can thus have the benefit of the Dallas markets without the trip to town, and the country merchant is not required to carry a large stock of slow-selling merchandise, such as implements, machinery, supplies, etc. He can thus do a bigger and more profitable business on smaller capital and give his customers better service than ever before.

Distinction will be given the cars of the line by the adoption of battleship gray as the standard color for the road—cars, stations and all.

The active spirit in this enterprise, and the author of the many innovations—all inspired by the belief that to serve the people well and build the country up will be profitable for the road as well as all concerned—is a young Southern man, not yet 30 years of age, who was without previous experience in undertakings of the sort. Active vice-president and general manager is the title he bears, and James Willard Crotty is his name when all spelled out. Ordinarily, only the initials "J. W." appear. He has lived in Dallas practically all his life, and comes of old Kentucky stock. With a commercial education he early began his business career, finally engaging in the real estate business in Dallas some six years ago. He specialized on inside business property and made a pronounced success because when he offered a piece of property for sale he knew everything there was to know about the property, its history, its good points, what could be done with it, etc.

Something over two years ago Joseph F. Nichols, an attorney of Greenville, broached the interurban project to Crotty, who on investigation agreed to take hold of it. Rights of way and franchises were yet to be secured and stock subscriptions obtained. On account of the particularly rich territory the road would cover, other interests strongly opposed the newcomers in the field, and there was a fight every step along the road. A most strenuous campaign was carried on, but by sheer grit and superior fighting abilities Crotty finally beat out all opposition, secured his franchises and rights of way, and won the good-will of the people of the territory, among whom there are 900 subscribers to the company stock.

Then came the financing of the road. The strongest kind of Boston backing is behind the road now, but many disappointments had been met, and it took a dozen trips to the commercial centers of

the country to finally put the matter through.

Not being familiar enough with any feature of the undertaking to know whether a man he might hire was competent for the work, or if his engineers and financiers were steering him right, Crotty threw himself into the job of learning every possible detail that he needed to know, with the result that when catenched in Boston he revealed an intimate, accurate knowledge of physical and financial facts about the enterprise that astonished his inquisitors.

To the loyalty of his friends Crotty ascribes the possibility of his success. Forest E. White, a capitalist previously of Galveston, is president of the road, and also of a bank which Crotty and his associates have bought and reorganized at Greenville. To White's unfailing loyalty and co-operation Crotty acknowledges a vital obligation is due. "Without my friends I could have done nothing," he declares. "Without Crotty's ceaseless energy, indomitable will and overwhelming resourcefulness it would have been useless for us to offer aid," his friends reply.

Officers of the traction company now are personal friends, none of whom was a traction expert. When the road is ready to operate, however, a general superintendent will be in charge who knows every detail of operation, and there will be no one in the operating department except practical, competent men. The officers of the company will remain without material change, and Crotty will continue to be the guiding, directing force.

## IN SALTVILLE VALLEY.

Interesting Industries Based on Mineral Resources in Southwest Virginia.

[Special Cor. Manufacturers Record.]

Saltville, Va., August 30.

When the train which carries you from Glade Springs on the main line of the Norfolk & Western Railway reaches the top of the hill which forms the watershed, and you catch the first glimpse of this valley, you will probably be led to exclaim that you have never seen one more beautiful. It is elliptical in form, something more than a mile long and a little less than a mile wide, rimmed with low hills that are crowned with timber, while from the lowest point almost to the hill crests bluegrass, growing lush and long, gives the whole a billowy-meadow appearance. To the right, as you gaze down this valley you see at picturesque points on the hill-sides handsome homes, with great green-swards reaching down to the entrance gates, that fill the eye with an ideal picture of the best of rural life. On the rising ground to the left are other homes, neat, attractive, but lying closer together, with church steeple and tower of school-house showing here and there, the whole giving the idea of a model county village. Lazily grazing the knee-deep grass in numerous pastures are herds of fat, sleek cattle. Streams of water, fed by mountain springs, glance hither and yon in the sunlight.

Away down the farther end you see black objects moving slowly back and forth across the valley, like great birds flying in straight parallel lines near the surface of the ground. Over the hill, at the extreme left of the lower end, a cloud of smoke rises and drifts lazily to absorption in the atmospheric currents.

Altogether you think the scene the loveliest, happiest, laziest imaginable.

When the train draws up to the station you see a few more evidences of activity. You are struck by the great amount of mail discharged, by the size of the express

shipments. You see a large store building near, and if you go inside you will be reminded of a department store in a city of considerable size. You note that there are offices on the upper floors of the store building. Looking northward from the store building you see that the black objects moving back and forth across the valley are cars that run on an aerial tram—a continual procession of rock-loaded cars coming down from the hills on the east; an equal number of empty ones meeting and passing them from the west. Going northward to the end of the valley you look west through a narrow opening between hills and see a large industrial plant whose smoke you long ago described, and the very air about which, as you draw near, seems instinct with life and activity.

The plant is that of the Mathieson Alkali Works, the store back yonder their store and commissary, the offices above it their general offices. And the Mathieson Alkali Works are among the most important of Southwest Virginia's industrial concerns. In spite of the seeming lethargy in valley and village, they are the central point about which are employed almost 1000 men in supplying raw material and working it up into finished product.

A hundred or so years ago a man named King, whose home, built in 1807, still stands in Abingdon, began here the manufacture of salt, an industry which was continued, subject to the vicissitudes of war, until about the beginning of the present century. During the Civil War the Confederate Government carried on salt-making here, and several of the States had here their individual operations also. It was thus one of the points of extreme importance to the Confederacy until 1865, when it was taken by the Union forces.

In the early nineties the Mathieson Alkali Works were organized for the manufacture of salt, soda ash, caustic soda, bicarbonate of soda and kindred products secured from a combination of rock salt and limestone, and for carrying on a general merchandise business and farming operations. This concern, capitalized at \$10,000,000, purchased this lovely little valley, as well as thousands of surrounding acres. The valley is underlaid with rock salt, portions of the hill lands with a limestone of the proper kind for the combination necessary to make the various kinds of soda. After laying off a townsite, building the manufacturing plant with sufficient surrounding grounds and reserving the limestone quarries, the company still had remaining thousands of acres of land to devote to agricultural purposes, and these are mostly leased for those uses. As this is a natural bluegrass region, livestock raising is found highly profitable, and most of the agricultural area is devoted to the raising of high-bred cattle. These cattle go for the most part to export, and that without feeding between bluegrass fields and shipside. Those now in process of maturing are as smooth and handsome a "bunch" as I have seen anywhere in the country.

The Mathieson Alkali Works continued in the salt-making business for some time, but finally abandoned it and are now engaged exclusively in the production of the various kinds of soda. Of the present products, soda ash leads in tonnage, being manufactured in all its trade forms and shipped in large quantities to all sections of the country. Caustic soda, for use in making soaps, and bicarbonate of soda, for cooking purposes, are also produced in large quantities, the latter being put up at the factory in convenient packages for trade uses. Bicarbonate of soda is

now being used extensively also by wood workers to keep the sap in lumber from staining it. The soda neutralizes the acid in the sap, thus robbing it of its discoloring power.

The raw materials used in the manufacture of these sodas are for the most part salt and limestone, though a considerable quantity of ammonia is used in making soda ash. The salt is secured from wells drilled into the rock-salt formation underlying the valley, from which it is pumped in solution and carried to the factory in pipes. The limestone is taken from quarries in the hills three miles east and hauled to the factory over the aerial tram mentioned above. The ammonia is shipped in by rail.

Though this soda-making concern is the sole owner of and its operations the only ones carried on within this little valley, yet there are near neighbors whose activities accentuate the industrial thrill that is felt by one who carries long enough to catch the spirit of this place. Four miles to the north, on the North Holston River, which flows directly by the alkali plant, is located the plant of the Southern Gypsum Co., a concern engaged in manufacturing various products from the gypsum rock mined there.

Gypsum deposits of commercial purity do not abound generally in the country, and, as far as known, those found in this immediate vicinity are the only important ones in the South. Extensive tests made by diamond drill and actual mining have shown the gypsum at North Holston to underlie a considerable area, of which a large acreage was purchased by the Southern Gypsum Co. as the basis for its operations. The deposits in these lands are of great purity, being 79.26 per cent. lime sulphate and 19.40 per cent. water.

The rock is mined by shafting down on the lead, which is about 30 feet thick, and which stands on an angle of about 45 degrees, and then driving into it horizontally from each side of the shaft. This will be continued at different intervals until the bottom of the deposit is reached or the shaft has been sunk as far as practicable.

From the mining levels the rock is carried to the surface and on up to the top of an overstanding tippie, whence it is taken by gravity to a series of crushers, which grind it to small size. The screenings from these crushers are used as land plaster, and go to market without further treatment. The remainder goes by aerial tram 1400 feet to the mill, where it is again ground, this time until 90 per cent. of it will pass through a 100-mesh screen. From this grinding the gypsum is carried into the calcining kettles, and there subjected to a heat of 350 degrees Fahrenheit, coming out as plaster Paris, which is its first finished form.

From plaster Paris it is changed by different treatments into various other forms of plaster. As plaster Paris "sets" in about five minutes, a "retarder" must be added to make it available for ordinary plaster work, and this is added in quantities that vary with the varying character of the uses to which it is to be put. For plain plaster the setting time is retarded to four hours; for fiber plaster to a shorter time.

The various kinds of plaster made are those to be used with sand for ordinary work, those containing wood fiber or hair, the white plasters for finishing interior walls, stucco, white plaster Paris for various uses and plaster Paris green for the extermination of potato bugs. Preparations are being made for manufacturing plaster board, to take the place of lathing for inside work. This is made by pressing a sheet of thick, heavy paper on

either side a thin sheet of plaster, making a stiff board of any size required. These boards are nailed to the studding and the plaster applied directly to them without the intervention of laths. Wood fiber plaster is made by reducing the wood to fiber and then mixing it with the plaster. This, when it leaves the plant, is ready to be mixed with water and spread.

The land plaster, used as a fertilizer for numerous crops, is especially popular with peanut growers, many of whom believe they cannot raise worth-while crops without it. It is also an excellent thing for alfalfa, and for legumes generally. Large shipments of crude gypsum are made also to Portland cement plants, which use it as a retarder for cement. Shipments of its products are made by the Southern company as far north as Baltimore, as far west as Nashville, as far south as Miami and St. Petersburg, Florida.

While the Southern company's plant is designed to handle ultimately 500 tons of rock daily, it is now getting out an average of 400 tons, of which it ships about 125 tons in the crude state, and calcines about 275 tons. The output will be increased later. It uses electric power secured from the Appalachian Power Co., but has a power plant of its own which it formerly used, and which it now holds in reserve.

The Southern Gypsum Co. was organized in 1906, and began shipping its products in 1908. In addition to its mines and mill, it owns a railroad  $4\frac{1}{2}$  miles long, extending from North Holston to a connection with the Saltville branch of the Norfolk & Western. This road the company built at a cost of about \$100,000. It is well constructed, on a good grade, and is equipped with everything necessary to the easy handling of traffic. The capital stock of the Southern Gypsum Co. is \$500,000. The officers are Dr. F. A. Wilder, president and manager; A. W. Ristine, vice-president; C. H. Ewing, secretary and treasurer; E. T. Archer, superintendent.

At Plasterco Station, just over the hill-rim to the south of Saltville, is another gypsum plant now actively at work. It is on the property of the Buena Vista Plaster Co., which was leased in 1908 by the United States Gypsum Co., by which latter organization it is now being operated. The rock at this place is being taken from a 50-foot shaft, and the mining operations are conducted much as those at North Holston. Here also are made plasters of various kinds, while a big tonnage of the crude rock is shipped to cement mills. One product made at this latter plant which is not made by the Southern company is a sort of hollow tile or block for partitions in office buildings and other large structures.

When the United States company took charge of this property it found only a very crude plant, and most of its efforts are now being bent toward putting up buildings and installing machinery for turning out a large product of gypsum in its various forms. For that reason the present production is comparatively small, though several hundred tons are handled daily. The plant being erected will be modern in every particular, and when it is completed and in operation the output will be very large.

The United States Gypsum Co. is a \$7,500,000 concern, with operations in numerous places throughout the country, and with a very large aggregate output. S. L. Avery of Chicago is president; S. Q. Fulton, vice-president; S. T. Meservey, secretary, and O. M. Knode, manager of operations. Mr. Knode has been here re-

cently looking after the work of plant construction.

The Saltville branch of the Norfolk & Western Railway is only nine miles long, but the road probably has no other branch of equal length that gives it freight bringing in so much money to its coffers. The Mathieson company's shipments in and out run almost \$500,000 a year, the Southern Gypsum Co. furnishes it 400 tons a day outbound, and a considerable amount inbound, while the United States Gypsum Co. is giving it an ever-increasing amount both going and coming. Then there are shipments of cattle and other farm product, which, with a considerable amount of miscellaneous traffic, swell the total up to a very large amount for a very short road.

GEO. BYRNE.

### Paper Pulp from Bamboos.\*

Whether or not the manufacture of paper pulp from bamboos is to be a commercial success is a matter of considerable uncertainty in the Far East at present. While the latest development of the enterprise is the inauguration of a definite movement toward the establishment of pulp factories in Siam, Burma and India, the experience of companies actually engaged in the undertaking seems not to have been altogether successful.

In India the matter of developing the industry has been discussed in the Indian forest records by officials concerned in the utilization of India's forests, the report being designed to afford data for action on the part of investors. To secure definite facts for the purpose a considerable number of localities known to have large growths of bamboos were selected and information was secured from them as to the various species of bamboos to be had, their respective advantages for the commercial manufacture of pulp, possible advantageous sites for factories, the cost of transportation, cost of labor and similar data.

Five places in lower Burma and six places on the west coast of Southern India were selected as localities especially favorable from the standpoint of raw materials, transport facilities and available markets. The enterprise in India seems to hinge largely upon the question of satisfactory and cheap transportation. Two notable factories have been established for the pulping of bamboos, one by the Mitsu Bishi Goshi Kaisha in Formosa and the other by a Hongkong corporation near Haiphong in Indo-China.

The last-named concern is a public corporation, and best represents the commercial phase of the business. The factory has been established under English and French supervision and control with a capital of \$316,800 gold. The company was organized about three years ago, and the plant was purchased in Scotland. The installation was considered complete about a year ago, and an attempt has been made during the past year to manufacture pulp. Various troubles with the plant were experienced, however, and some machinery had to be replaced, and there was some question as to the success of management. The result so far has been that the company has a loss of \$149,909 local currency, or about \$71,956 gold, and according to the auditor faces a further loss of about \$25,000 gold in the immediate future.

The company has gone through something of a reorganization and has employed other experts and expects to be able to make its business pay. Pulp so far manufactured has had the fault of be-

\*Consul General George E. Anderson, Hongkong British China, in Daily Consular and Trade Reports.

ing too dark in color to bring a satisfactory price. Bamboos most of the time so far have cost \$7.10 local currency, or \$3.41 gold per ton. Little of the product so far has been sold, but samples submitted in London, however, indicate that the company may receive as high as £12, or \$58.27 gold per ton. The maximum output of the factory so far has not exceeded half of the original expectation of 18 tons of pulp per day, but it is now expected that with a small addition to the plant a normal output of 12 tons can be maintained and that this rate may be exceeded in time with comparatively little additional expense. The company now feels assured of a proper supply of bamboos, which occasioned considerable doubt at one time.

The second plant of consequence in this industry, that of the Mitsu Bishi Goshi Kaisha in Formosa, has been in operation something over a year. It was established after years of experimenting. The entire output of the factory is used in the paper mill of the same company at Takasago, Harima, Japan. Definite figures as to costs and the volume of the output are withheld by the company. It appears that the bamboo pulp is more expensive than ordinary imported pulp, but that it is suitable for the manufacture of Japanese paper of high quality and that its use is fairly profitable for such special purpose under the conditions obtaining in Formosa and Japan and with the same company operating the pulp mill and the paper plant.

The critical feature of the entire enterprise seems to be in the matter of bleaching the pulp. While it is claimed that the expensive caustic-soda process which has been necessary heretofore can be discarded under new patented processes, the experience of the Tonkin factory so far has not been satisfactory in that respect. Experts claim for bamboo pulp certain advantages, among which are the fact that bamboo pulp can be had in parts of the world where other pulp materials are not to be had; it can be made a regular land crop, controlled by the pulp factories, and which can be produced in any amount in three years; it is usually accessible to water or other cheap transportation; it produces a fine pulp, which felts readily and produces a thick opaque paper of greater thickness than usual for its weight, making it especially suitable for particular varieties of paper; the fine flexible fiber is easily digested by the ordinary bisulphide process and the bamboo can readily be handled mechanically and chemically, and as a crop material its price and the abundance of its supply can be controlled within narrow limits for the benefit of the factory to be supplied. The bamboo has been used for paper making by the Chinese for centuries, and is the material from which the greater portion of the coarse light-brown paper commonly used in Chinese life is made. From time to time it is announced in the native newspapers that Japanese interests are preparing to make pulp from bamboos in various provinces of China on a modern commercial basis, the latest announcement of the sort being that an extensive establishment is to be erected in Hupeh Province for the manufacture of pulp for a Japanese paper mill.

In the production of bamboo pulp for export as pulp to other parts of the world there is, of course, the great disadvantage of the cost of transport for the product, which in the case of the Japanese-Formosa enterprise is minimized by short haul and permanent and fixed volume of business to and from the same point. At present, however, the difficulties to be overcome seem to be in the actual process of manufacture.



# Louisiana Crop Prospects.

[Special Correspondence Manufacturers Record.]

New Orleans, La., September 1.

Louisiana has a great crop prospect this year, her cane, corn, cotton and rice promising a return of some \$120,000,000, to say nothing of the numerous products outside of these four staples. There will be other millions from truck, forage crops, fruits, berries and live-stock. More than \$1,000,000 was realized from the strawberry crop of one section along the Illinois Central in Tangipahoa parish. Prospects are that the orange and grapefruit crops will be the largest in years, with estimates now made of 300,000 crates, which should bring around \$700,000. Where special pains are taken in picking, packing and marketing some Louisiana growers get \$5 a box for a large part of their crop, for Louisiana sweets are famous the world over for their delicious flavor, and Louisiana grapefruit are not surpassed. Visiting California citrus-fruit growers have spoken with much enthusiasm about the possibilities of a very extensive development of the industry in the coast country of Louisiana, and in time much of the lowlands that are now undrained will doubtless be the site of many orange groves.

The most striking, significant and compelling feature of the situation, however, is the fact that corn is far and away the leading crop of Louisiana now. There is always a discrepancy between United States Government and State statistics as to corn production in Louisiana. The State figures are taken from assessors' returns and are much lower than Government figures, so corn men here accept the Government figures as more likely to be accurate. There was a discrepancy of several million bushels in the two reports on last year's crop. Figures for this year have not been compiled, but when they do come out it will be necessary to bear this explanation in mind in order to reach a proper understanding of the situation.

Estimates from various sources as to the 1913 corn crop range between 70,000,000 and 80,000,000 bushels. Some of the railroad men, whose freight scouts have been thoroughly over the country, report the crop very likely to run to 80,000,000 bushels.

With the Kansas corn crop injured, and with the corn crop of other Middle West corn States very much curtailed, there is certain to be a demand at good prices for all the corn the country has raised. Louisiana has a surplus and will have corn to sell. Although Louisiana corn is premium corn for exporting, being hard, almost weevil-proof, with lowest per cent. of moisture of any corn raised, as demonstrated in numerous tests, and is mature, thoroughly dried and ready for shipment weeks before any of the corn raised farther north is fit for the market. It is altogether likely that domestic requirements will take all the surplus corn Louisiana has produced this year. It will probably go North to the States of the Middle West. Texas has made no demands on Louisiana for corn, her bumper crop, estimated at 200,000,000 bushels early in the season, having been made before the dry spell there. Since July 1 there has been a deficiency in moisture in many parts of Texas; so much so that the enormous cotton crop prospect of July 1—anywhere between 5,000,000 and 6,000,000 bales—has dwindled to an estimate 4,000,000 or less. The State is spotted, to be sure, as is inevitable in a territory so extensive, so that in some sections cotton is in very good shape, while very bad in others, but reports are that

corn got ahead of the hot spell to an almost complete extent.

The price of corn is hardly likely to go below 70 cents, so Louisiana's corn crop should be worth all of \$50,000,000. The market price in New Orleans is usually Chicago prices, with freight added.

Confronted with administration conditions of deadly hostility to the sugar industry of Louisiana, which seem to afford no escape from destruction, the interest taken in corn growing is of more than ordinary significance and importance. That there will be most grievous personal loss through the destruction of the sugar industry, and that readjustments in commercial and financial circles will be radical and drastic, there can be no room for doubt but already attention has been riveted to the great possibilities in corn growing here, with the indication that within the near future there will be an increase in corn production which will go far toward replacing the sum now received for the sugar crop of Louisiana. There is a good sugar crop this year, estimated to produce about 300,000 tons of sugar, which should bring in the market from \$25,000,000 to \$30,000,000. The additions to the corn crop, which are possible within the next dozen years or less, would, at present prices, recoup the sugar loss in value of product raised. Also there is now, and will be to an ever-increasing extent, a tendency toward the raising of cattle and hogs and a general diversification of agriculture.

There would have been plenty of land in Louisiana, with its millions of acres of undrained wet lands and other millions of unbroken cut-over lands, for the sugar industry to remain and expand, while corn growing and diversification were also coming along; this is merely to state that though one of the fairest of Louisiana's children has been ruthlessly murdered in the house of her friends—Louisiana, after having first felt her grief, in a human way, proposes to bear the loss as a man should. There will be resentment, but not despair.

The importance to Louisiana's development of the advent of the Funks into the State can hardly be overstated. In every corn-growing State in the Union the name of Funk is a household word. On their vast farm at Bloomington, Ill., father and sons have for more than a generation raised seed corn and become famous for their expert knowledge of everything about corn. Julius Funk is at the head of a company that has thoroughly ditched and drained a 10,000-acre tract of wet lands adjoining the Southern Pacific Railroad at Paradis, 27 miles west of New Orleans. A portion of this tract has been sold to Northern farmers. Mr. Funk has spent a large part of his time at Paradis during the past three years, and has engaged in corn raising on his own account till he has thoroughly demonstrated the adaptability of reclaimed lands to the most successful growing of corn. With his brother, Dwight Funk, and the Demanges, father and son, men of large means in Bloomington, he has just bought 8000 additional acres of land on the east side of the Mississippi River, a dozen miles or so north of New Orleans. It is understood that both this tract and the Paradis tract will be devoted mainly to the raising of corn.

When the corn man of the North learns that the Funks have come in here on an extensive scale for the reason that they have found this to be a fine corn State, he immediately begins to sit up and take

notice. The contrast between Louisiana's fine corn crop this year and the withered, burned fields of the desolated States to the north gives immeasurably added emphasis to the advantage of being in a section where moisture never fails and where at least a 60-bushel crop can be counted on with the certainty of the tides.

Louisiana is picking up again on cotton this year. From her maximum of 1,100,000 bales a few years ago she went down to 250,000 or so through the weevil and the paralysis he brought. This year the outlook is good for 500,000 bales, in spite of some weevil damage and deterioration from conditions awhile ago. Lint and seed, the crop will very likely bring around \$75 a bale this year, so that cotton will bring some \$37,500,000 of new wealth to the State for this year's crop.

There has been a very considerable increase in rice acreage this year, the figures being 405,000 acres, against 352,600 last year. Some of this increase is due to the extension of service by the Schell Canal, near Opelousas. The yield last year was 11,812,000 bushels, so there should be 13,367,500 bushels for the Louisiana rice crop this year if the percentage holds good. Some of the new crop which is in market here is not up to last year's standard, being light weight and not well matured. Out in the country, however, it is believed that later shipments will grade higher, and although the market is considerably off compared with last year's prices, it is figured that rice ought to help swell the Louisiana crop receipts this year by something like \$12,000,000 or \$13,000,000.

ALBERT PHENIX.

## Centralized Credit Control or Real Freedom of Credit-- Which Shall We Have?\*

By ELMER H. YOUNGMAN, Editor *Bankers' Magazine*.

The banking bill (Senate bill 2639) introduced in the Senate on June 26 is, in my judgment, one of the most dangerous and unsound measures ever introduced in the American Congress.

It virtually proposes to concentrate fifteen or twenty billions of banking credit under the control of a Federal Reserve Board, thus making possible what is now impossible under our system of numerous small banks with their ownership and management widely scattered, namely, the complete domination of credit by political bosses or by the financial powers to whom such bosses are subservient.

What a rich prize that would be as a bone of contention between rival political bosses and rival financial interests—the power to control credit and to fix the rate of discount in every corner of the country. Outside the Russian Empire, where the Imperial Bank is a department of the State Treasury, no such politico-financial despotism exists.

This country does not need and will not tolerate a central bank (even if called a National Reserve Association) dominated by big bankers and those whom they control.

Nor does it need nor will it tolerate a political bank (even if called a Federal Reserve Board) controlled by the ruling political party.

The founders of this Government sought to avoid placing the purse and the sword in the same hands. The Secretary of the Treasury and the Comptroller of the Currency make their reports to the Speaker of the House of Representatives, not to the President. But here is a proposal to place in the hands of the President the power to give or to withhold credit, which has been aptly defined as the life-blood of commerce.

Such a power is too great to be placed in the hands of any man, and its exercise by him, even through his appointees, might become a source of grave danger.

Neither should this power be entrusted to a central bank (or National Reserve Association, so called), nor to any other board of any kind whatsoever, and however composed; for no board—whose members may be—can sit at Washington, or any other place, and determine justly or accurately the amount of credit, the kind of credit or the rate that should be paid for such credit.

Nor can these matters possibly be de-

termined by Congress, nor by any department of the Government.

The only one who has sure knowledge of the needs of currency and credit is the man or the community that wants it.

The only sure means of testing the demand for currency and credit is the bank, which has its finger on the business pulse of individuals and the community. Banks are the scales that weigh the credit of communities and individuals, and are therefore the only instruments that can properly gauge and supply the demand for credit and currency.

When I take my note to a bank and lay it down, I buy credit from the bank, just as when I go to the fish-dealer and lay down my money I buy fish. For the bank to dictate to me (and whether this is done by the Government, a board or any other agency whatever comes to the same thing) what I should get in exchange for my note—that is, the kind of credit or money I should have—whether bank notes, coin, paper certificates or checks, would be just as impertinent as for the fish-dealer to try to give me codfish when I asked for mackerel.

Whether I shall obtain credit at all is a matter between me and my banker; because he is the only man in the community who has the machinery for testing my ability to pay.

What kind of credit (or currency) I shall swap my own credit for, that is my own affair purely.

All that the Government ought to do is to see that the notes are properly engraved so as to render counterfeiting difficult, and to see that the banks provide the coin and the machinery for promptly paying their notes.

My right to credit at the bank is based upon my ability to pay as promised—something which a bank alone is equipped to determine.

The right of the bank to issue its circulating credit notes should rest solely on the possession of an adequate amount of coin to pay the notes on demand and the machinery (through the clearing-house) to make redemption a fact and not a theory.

With a system of redemptions in effect all over the country similar to that long in successful operation at Boston for clearing out-of-town checks, and with this system extended to include bank notes as well as checks, the bank-note question would be practically solved; even if there were no limit to the issue of notes, and

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no pledged security whatever, it is very doubtful if there would be any redundancy of notes, for it must not be lost sight of that the banks do not determine the volume of notes, but their customers use only the amount of notes required. But it might be a wise precaution to limit the circulation to 100 per cent. of the bank's capital, and to set aside a small part of the present tax on circulation as a safety fund out of which the notes of failed banks might be paid.

Under a proper system each community will decide for itself whether it wishes circulating credit in the form of checks or bank notes. (This statement is fully sustained by the experiences under the bank-note systems of New England and Indiana prior to the Civil War.)

Let me repeat, as being of supreme importance, that the people of each community themselves should retain control of their credit machinery, and not turn it over to a National Reserve Association, a Federal Reserve Board or any outside agency whatever.

The power to determine the amount, kind and rate of credit is one which no community should yield up to outside domination. President Wilson's proposal to set credit free is really a proposal to enslave it—to take it away from 25,000 banks, with their many thousands of shareholders, their millions of depositors and their thousands of officers, each in touch with local conditions, vitally interested in local prosperity, and in close personal touch and sympathy with those who deal with the banks, and to place this power in the hands of a political board at Washington. And this is Mr. Wilson's idea of "setting credit free!"

Mr. Bryan is reported as saying that the notes to be issued under this bill are Treasury notes. He is mistaken now, just as he was in 1896 when he mistook a 50-cent piece for a dollar. The proposed notes are bank notes, whatever they "purport" to be. For they are issued only against security put up by the banks, and are redeemed with the gold supplied by the banks. They are in no sense Treasury notes, for they are not based upon the credit of the Government, but upon security furnished by the banks.

But whoever drew this bill does not seem to have had the faintest suspicion of what a real credit bank note is or what are its functions.

I shall have little to say of the injustice of this measure toward the banks of the country, although much might well be said. It is proposed to take away from the reserve city banks several hundred millions of deposits of other banks which they now hold, and to compel these reserve city banks (and in fact all national banks) to contribute 20 per cent. of their capital to be used in organizing Federal Reserve Banks, which, to an extent at least, will be competitors of the banks thus despoiled of their funds. And the banks thus involuntarily yielding up a large part of their deposits and one-fifth their capital will have practically no voice in the management of the competing banks created with their money, and must be content with whatever return the political board of control chooses to let them have; in other words, the banks furnish the capital and a large part of the deposits for equipping and running the Federal Reserve Banks, the Government kindly provides the management and takes the most of the profits.

Whether or not this is "setting credit free" I do not know. But it certainly is being very free with other people's money.

Have the banks done anything for which they should be thus deprived com-

pulsorily of their capital, their deposits and their profits? No; on the contrary, they have increased in number, built up their deposits, loaned vast sums to the communities where they are located and have been one of the prime forces in the development of American agriculture, manufacturing and commerce, and in return for these great services the national banks for the last 43 years have paid to their shareholders in the shape of dividends but little over 6 per cent. on their capital and surplus.

If it be true, as I believe, that the control of credit should not be taken away from local banks and placed in the hands of a Reserve Association (really a central bank), or in the hands of a Federal Reserve Board composed of political appointees, does it follow then that we have encountered an impenetrable barrier to sensible currency and banking reform? I think not.

Suppose, so far as the problem is one of banking machinery, we forget all these learned essays about rediscount centers, reserve associations and Federal Reserve Boards. Let us free our minds of the thought that it is necessary to set up any new machinery of any kind whatever. Instead, let us take the machinery we have, with which the banks and the people are familiar and whose workings have stood the test of experience.

The clearing-houses of the country constitute this machinery.

Let us bring all the national banks into the clearing-houses by legislation. The others will follow as a matter of convenience or necessity.

Simply provide that all the national banks shall become members of a clearing-house now existing or to be formed at the most convenient commercial center.

Require the banks to provide for the redemption of checks drawn against them through these clearing-houses. Also similarly to redeem their notes.

Provide that these clearing-houses shall appoint examiners to examine the banks which are members.

Provide for the appointment of a Government examiner to examine the clearing-house management.

It is the business of the banks through their clearing-house to see that the members of the clearing-house observe the rules of sound banking.

It is the business of the Government to see that the clearing-houses observe the rules of fair play—that they do not become arbitrary or oppressive in the enforcement of their regulations.

Clearing-house examination of banks, applied to all the banks of the country, will insure compliance with sound banking principles and thus greatly reduce bank failures, if it does not absolutely prevent them.

Government inspection of clearing-houses would prevent unfair action by these organizations, thus conserving the rights of the smaller banks and of the people.

It might be desirable in addition to have the constitution and by-laws of each clearing-house association subject to approval by the Comptroller of the Currency.

These suggestions put into practice, the two most desirable objects of banking regulation would be assured, namely, the universal observance of sound banking principles and fair play toward all banks and toward the public.

By providing for the redemption of bank checks at par the breaking down of the domestic exchange system, such as occurred in 1907, will be prevented. (The experience of the foreign department of the Boston Clearing-House in the year

named proves this.) In other words, the most annoying feature of bank panics would be removed, and these panics thus shorn of their worst effects, if not prevented altogether.

With a common point at which all national banks in a certain district must redeem their checks, the national banks might then be given the right to issue their credit notes at least to the extent of their capital; or any State bank or trust company could have the same right on becoming a member of the clearing-house and complying with its rules.

There is no haste for currency legislation at the special session of Congress. If an emergency should arise demanding additional currency next fall (which seems unlikely) it can efficiently be met by a simple amendment to the Aldrich-Vreeland law (act of May 31, 1908) reducing the tax on circulation authorized by that act; or, better still, empower the Secretary of the Treasury in his discretion to remit the tax for a period of from three to four months during the fall and winter.

Let the discussion of this bill go on before the people until their deliberate opinion can be had.

I wish to state some conclusions regarding money and banking which seem to me fundamental:

(1) The real money of this country is gold.

(2) Banks should be compelled to carry only real money (gold or gold certificates) as reserves, otherwise they will be building up one credit on another credit.

(3) It is the function of the Government to coin money.

(4) The people themselves should regulate their own credits, and they alone should and can determine the form in which this credit should be issued.

(5) Demand for this credit will be measured and tested by the banks, which are the natural machinery for such purpose.

(6) Bank notes should be engraved by the Government, but issued by the banks, for the reason that the banks are in daily touch with business conditions in their communities, while the Government is not.

(7) The Government should see that the banks make proper provision for the daily redemption of their notes on demand.

(8) Government regulation of clearing-house organization and inspection of clearing-house operations will insure both efficiency and fair treatment of the banks and the public.

Let me repeat that in my judgment Senate Bill 2639 is one of the most dangerous proposals ever introduced into the American Congress; that it will take away from local communities the regulation of their credit and place this regulation in the hands of a board, remotely situated, that cannot possibly exercise such function with accuracy and justice.

The proposed intermingling of banking and politics is unwise and perilous.

The concentration of credit in the hands of a Federal Reserve Board—whether this board shall be composed of political appointees or of bankers—is a most hazardous experiment and one which may involve the gravest consequences.

But above and beyond all, this bill perpetuates the utterly mistaken notion that the Government can and should regulate the volume of bank notes and of other credits instead of allowing such demand to be daily regulated automatically through the banks of the country. Any measure based upon this fundamental error must of necessity prove unsound

and dangerous in its operations creating and multiplying the very difficulties it is designed to prevent.

## NOLACHUCKY RIVER POWER.

Hydro-Electric Energy for Three East Tennessee Towns.

[Special Cor. Manufacturers Record.]

Greeneville, Tenn., September 1.

On the Nolachucky River, nine miles south of this place, the Tennessee Natural Development Co. is just now engaged in putting the finishing touches to a hydro-electric development for the Tennessee Eastern Electric Co. of Johnson City that will play an important part in the industrial life of at least three East Tennessee towns. The work of building the dam and power-house has been completed, the machinery is being rapidly installed, and early the coming month the current of the river will be transformed into electric current and made to furnish light and power for the uses of man.

The site of the dam is a narrow gorge cut through the hills by the river, and the dam which is 39½ feet high, with its flashboards, is only 240 feet in length. It is 53 feet wide at the base, having been given this unusual proportion of width to height to allow for building it higher when the demand for more power renders additional height necessary. The dam forms a pool five miles long, but the storage capacity is rendered comparatively small by the extreme narrowness of the river gorge. The dam is of concrete.

The power-house, of concrete and brick, is 59x104 feet, and the present installation consists of two 2500-kilowatt Allis-Chalmers direct-connected turbo-generators. As it is expected ultimately to double the potentiality of the dam by raising it, room is left in the power-house for duplication of these turbo-generators. The installation consists further of a Westinghouse switchboard and Allis-Chalmers transformers. A 20-ton Whiting hand crane, built by the Whiting Foundry & Equipment Co. of Harvey, Ill., has been installed for convenience in handling repair work. The 48 miles of transmission lines necessary to deliver the current to Greeneville, Jonesboro and Johnson City have already been built.

The Tennessee Eastern Electric Co. of Johnson City, of which W. A. Leland is president, has the electric-light, power and street-car systems in Johnson City and the light and power systems in Jonesboro and Greeneville. The company now secures its current from a steam plant in Johnson City, and this will be held in reserve while the wheels are going around on the Nolachucky.

The Tennessee Natural Development Co., which has done the construction work for the electric company, is a contracting concern, of which W. V. N. Powelson of New York is president and engineer, and the work has been done under Mr. Powelson's personal supervision. The material, machinery and supplies utilized in making this development were hauled from this place to the dam site by a heavy motor truck, thus demonstrating beyond cavil the practicability of the self-driving tractor in heavy hauling.

With the cheap power which this hydro-electric development will make possible in Greeneville, Jonesboro and Johnson City the manufacturing life of the three towns should take on new impetus. Raw materials of various kinds lie within easy reach of each, and all should profit by the opportunities for industrial expansion thus opened up to them.

Under Judge George Kelly, 400 citizens of Saline county, Arkansas, constructed 12 miles of the Little Rock-Hot Springs-Texarkana highway one day last week.



# Material Questions Occupying Public Attention in the South.

## AUTOMOBILES AND GOOD ROADS.

[Waco Times-Herald.]

It is good to read about these cross-country roadways, and we are reading about them every day. The Red to the Rio Grande roadway has rivals in all directions, and we are glad to know that such is the case; here, at least, the more the merrier.

The automobile is revolutionizing rural conditions in all lands. It is the potent factor in road construction, and some one has well said that "the day will come when a home in the country will have practically all the advantages with none of the disadvantages of a home in the city or town; and then one of the gravest of our economic and social problems—the congestion of population in urban centers—will be solved. This wholesome change will be brought to pass largely through improved school systems, largely through devices for lightening household labor, largely through adequate methods for marketing crops and financing farm needs, very largely through scientific, business-like methods of farm management and chiefly, perhaps, through a broadened and quickened sense of social kinship among the people themselves. But is it not evident that better schools, better marketing facilities and a closer neighborliness all depend upon better roads? Well-built and well-kept highways furnish the key to the full enjoyment of all those benefits with which rural life is being invested.

The people of Waco and of McLennan county will contribute to their own and to the general prosperity by looking carefully after the roadway that is coming down from Denver, one prong going from Waco to Galveston and the other from Waco to Laredo. But for the automobile, such a roadway would probably never have been heard of, but now it's a necessity. Let's push along the work of better and continuous highways.

## RIVER POWER WASTED.

[Kansas City Star.]

Business men with imaginations saw a great commercial highway in the muddy waters of the Missouri five years ago. Today Benage S. Josselyn, utilities expert, sees 50,000 horse-power drifting by Kansas City in the swirling current of the river.

Fifty thousand horse-power—the great Keokuk power plant generates only 200,000 horse-power—wasted on sandbars and winding channels! Wasted for want of someone with imagination to harness the swift current and make it work.

Mr. Josselyn, who planned and supervised the building of four hydro-electric plants at Portland, Ore., and who has spent \$22,000,000 there on the development of public utilities in the last eight years, believes the Missouri has possibilities as great as the Mississippi at Keokuk, Iowa, where the largest hydro-electric plant in the world recently was finished.

He sees in Western Missouri a network of rivers that might be harnessed and made to work for Kansas City. Keokuk sends its power to St. Louis, 250 miles away. If all the hydro-electric power within 250 miles of Kansas City were utilized, electricity would take the place of coal and the cost of production would be materially lessened.

"To compete with St. Louis and other Eastern cities in the manufacturing field," Mr. Josselyn said yesterday afternoon, "Kansas City must have hydro-electric power. In Portland we have reduced the cost of power production to a

fixed scale. Coal is the most expensive fuel. Oil costs just half as much, sawdust cuts the oil price in two, and water-power is the cheapest of the four, costing 50 per cent. of the sawdust price. From that scale, you see, water-power costs one-eighth of the equivalent in coal.

"The development of your water-power would be simple enough. Take a stretch of the river where there is a drop of 30 or 40 feet in 15 miles. Divert enough of the current to have a volume of 10,000 feet, hold it on a level for the 15 miles and drop it through turbine generators. Land could be acquired easily, as most of the property necessary would be along the river bottoms."

Mr. Josselyn suggested another solution to the question of power production in the establishment of a power station in the coal fields. Coal could be bought for six cents a bushel or less, Mr. Josselyn said, and instead of high freight rates and distribution cost the power could be transmitted to Kansas City in the form of electricity by high voltage.

The United States Engineer's office in Kansas City, which has charge of work and surveys along the river, believes the fall of the Missouri compares favorably with the fall of the Mississippi River near Keokuk. A hydro-electric plant might be practical, they say.

Mr. Josselyn was head of several railroad interests that centered in Kansas City nine years ago. He left here to go to Portland, where he has managed the Portland Railway, Light & Power Co. He resigned and left Portland July 1. Since then he has been in New York. He expects to move to New York this fall and make it the base for operations in the utility field.

## NEW LIFE IN RURAL VIRGINIA.

[Richmond Times-Dispatch.]

If you are downcast, good reader, or doubt the future of Virginia, take the train one of these fine August mornings and revisit your old home. Pass along the same dusty road to the old house and see the transformation. Mingle with your former neighbors and your old acquaintances; look at their fields in comparison with those you knew as a boy; study their farming methods, and watch them care for the fruits of the soil.

You will come back to business with hope in your heart, for you will be convinced that there is new life in rural Virginia, and that the farmer is learning well his lesson.

We think, of course, that Virginia people were always the best in the world, and we have never had the heart to criticize their farm life; yet we rejoice to think how much happier and healthier rural life is today than ever it was in the past. We love to catalogue the farmers' achievements and to record their progress in this simple fashion:

A generation ago it took half an hour to communicate with one's nearest neighbor; today one has but to ring the telephone.

Roads that were impassable in winter are open now, and slowly, but steadily, are being improved.

Instead of "scrub" stock, one finds the farmers breeding better horses, better cattle, better swine.

The old house which was unpainted now shines in the summer sun.

The fences which were neglected are in repair, and a smooth wire enclosure has taken the place of the old rail fence.

The girls bring water no longer from the spring beneath the hill, but need only

turn the spigot supplied by the pump and windmill.

Our women do not wear the fashions that their city sisters rejected, but are so well dressed that they can hardly be distinguished from the better class in the cities.

Farm implements, which used to rust in the fields, are well housed in painted barns and are kept in order.

Typhoid fever, which visited the neighborhood every year, has disappeared altogether or is found only in scattered localities.

Labor, though scarcer than it was in our boyhood days, is made far more effective through intensive cultivation.

Mail, which came late in the afternoon to the crossroads store several miles away, can now be had at noon from the box by the yard gate.

Churches, which held services but once a month, are now opened for Sabbath school every Sunday and for preaching twice as often as in the past.

This means progress and happiness and plenty! It means that the farmer is reaping where he has sown.

## ALABAMA FLOUR MILLS.

[Mobile Register.]

The Marion Times contains the information that Mr. W. F. Moore of Heiberger is installing a flour mill in connection with his sawmill and ginnery, and expects to be ready for operation in the near future. The mill will have a capacity of 300 bushels per day. A gasoline thresher has already been provided. Mr. Moore is quoted as saying that he is putting the mill in as a result of the requests of many farmers of different parts of the county, and a considerable number have agreed to plant wheat this fall. He expects to turn out a good grade of flour, and believes that a demonstration of two or three years will show the people that there is sufficient profits in wheat to induce more general planting.

The Times states that the growing of wheat was common before the war in that region, but rust was one of the causes of abandonment. Now that a rust-proof wheat is being grown, there is no reason why wheat should not be grown extensively, and the Times cites M. A. Crawford of that county as having produced a heavy yield last year which made good flour.

Interest in wheat growing is attributable to the approach of the boll-weevil and the necessity for diversification. In the program of "living at home" and making cotton the surplus crop an acre or so of wheat for each family would be a potent help in these times when flour is so costly. And, aside from that, the wise farmer will begin to figure on another money crop than cotton and corn. Admittedly, Central America and the Windward Islands, and the other islands of the Caribbean and South America as well, are heavy buyers of American flour. Mills that can grind the flour close to tidewater will have an advantage in saved railroad transportation that will enable them to compete with the bigger mills of the Northwest. Alabama should get ready for this business.

Additionally, the Southern farmer has an advantage of his Northwestern brother, for the Southerner can get his wheat off the ground and then plant the same ground in Mexican June corn and cowpeas and get two crops a year, whereas the man up North only gets one. By all means stir up the interest in wheat growing and flouring mills; there is money in it for the farmer and the miller.

## LOUISIANA PRODUCTS.

[New Orleans Times-Democrat.]

In view of the fact that the oyster season will open in the next few days, the Louisiana Conservation Commission has adopted rules and regulations for the government of the industry. First among these rules is the condition that only Louisiana canneries may utilize the State reefs and take oysters from them. This is a rule observed in Maryland, Virginia and other oyster-producing States; without protection of this kind the reefs would soon be left barren. The fisheries in Chesapeake Bay have suffered severely from the oyster pirates, and it has been necessary to organize a marine police to protect the reefs from marauders. Louisiana has such a force, which may have to be strengthened and increased, but its oyster grounds are far more fully protected than those of Maryland and Virginia.

Another rule adopted by the commission that will be welcome is the promise that all Louisiana oysters shipped out of the State, whether canned or raw and in the shell, shall be marked "Louisiana Product." This is a move in the right direction. We should be proud to boast of Louisiana products and supplies when they are superior, instead of apologizing for them or concealing their origin by marking them as from other States, as we have been doing heretofore. Thus, for a considerable time, Louisiana oranges, although the best produced in the country, the sweetest and the juiciest, were, in large part, marked "California," because the Californians had succeeded in impressing the prejudice upon the public that our seeded orange was not as good as theirs. The delusion was thoroughly exploded at the convention held in this city some months ago of the Citrus Fruit Dealers, who were enthusiastic in favor of the Louisiana orange as the best in many respects, and "Louisiana" is now stamped on the boxes as an honor rather than a discredit.

As for our oysters, they have maintained an honorable position so long that it has not been the practice—at least for a number of years—to conceal their origin, but none the less they have frequently been shipped to the Pacific coast as Chesapeake Bay oysters. Thus the Chesapeake reefs, which are rapidly becoming exhausted, have received undeserved credit for producing such fine "oysters" by those who have enjoyed the Louisiana product under a wrong name. The Conservation Commission will see to it that the Louisiana product is so designated wherever it goes that its fame and quality will be world-wide and people will demand it because it came from Louisiana.

This action in regard to oranges, oysters and other Louisiana products is in line with the present "Mino" movement in New Orleans, which demands that instead of our manufactured goods traveling under an alias as made in New York, Chicago or Grand Rapids, they be stamped "MINO" (made in New Orleans). We should feel proud of them and send them out as examples of what New Orleans can do and is doing. The British manufacturers were disposed at first to sneer at the stamp "Made in Germany" as indicating an inferior grade of goods, but the German movement has thoroughly proved itself and has carried German manufactures over the world and made a market for them. We will have the same experience when our manufacturers, merchants and exporters have abandoned the old, foolish and cowardly policy of calling our natural products and

manufactured goods by other names instead of presenting them as the output of Louisiana and New Orleans and calling attention to their superior quality, wherever superior, as they are in most cases.

#### BLACK MOUNTAIN'S COLONIES.

[Charlotte (N. C.) Observer.]

With the Lutherans as the latest, more denominational and related summer colonies around Black Mountain continue to become assured. There is nothing like it in this country, nor, so far as we know, in the world; for individually important summer colonies elsewhere do not compare with the Black Mountain scheme of things. It was natural and proper that these increasingly numerous colonies should be federated for common ends—some to a great extent and others to a less extent, but all co-operating in certain ways. As the first long step the Black Mountain people have now gotten under way arrangements for a National Religious Sociological Congress to be held there each September, beginning with September of next year. Speakers vitally identified with various efforts for the betterment of human conditions, including many men and women of country-wide reputation, will attend. In the future Black Mountain will no doubt be the scene of many more or less similar gatherings; and it will have the opportunity all during the warm months of hearing speakers whose presence at most other places considerations of expense or insufficient attraction would forbid. Trolley lines for effectively aggregating the colonists are due before long. Still possessing the unsurpassed advantages of climate, scenery, water and accessibility which started it on the road, Black Mountain has now reached the point where the developments made endlessly draw more. Watch this district, with Montreat, Ridgecrest, the Southern Y. M. C. A. and Y. W. C. A. conference home, the Methodist colony, Mr. R. O. Alexander, and other present assets, continue to expand.

#### ONLY WORKERS ARE WELCOME.

[Savannah (Ga.) News.]

Says Editor Richard W. Grubb of the *Darien Gazette*: "There is plenty of room in Georgia for the settler who wants a good home and is willing to work, but it is a mighty poor State for the loafer and vagrant." And he is right about it. Georgia, like all the other States, is laudably anxious to increase her population by a big percentage between censuses, to take high rank among the States in the number of people to the square mile, but she wants quality of population much more than she wants quantity. The number of loafers and vagrants is great enough already. Efforts are being made constantly to weed them out, to make them realize that the best thing they can do is to go to work.

Immigration of the right sort will be welcomed, but the State isn't ready to be a dumping ground merely to have a greater number of noses to count every 10 years. What is desired is more producers of farm and factory products. The man who works hard from day to day in the factory, supports his family and tries to be a good citizen is a producer just as much as the farmer is. The cities will welcome him just as much as the rural districts welcome a settler who jumps in and tries to turn into a productive farm some of the land that is now lying idle. Too many of such factory workers cannot be brought into the State by builders of new industries.

But whether the newcomer goes to the city or into the country districts, he won't be welcome unless he is ready to work.

The soil won't produce bumper crops by itself. Unless the farmer mixes intelligent methods in his farming operations, he can't expect to make a success in Georgia any more than in any other State, but if he takes advantage of the opportunities offered him, his success will depend upon his ability to hustle.

Just now labor is in demand on the farms. Cotton picking is in progress. The man who wants work can find it. It is a fine time to separate the workers from the loafers, a good time for anti-vagrant crusades in the cities and towns. Too large a part of the population of the cities is made up of idlers, white and black, whose means of subsistence are not easily understood by the man who works hard. While the country needs workers, the cities should not be called upon to support loafers. As the winter approaches the number of so-called casual and migratory "workers" in the South will increase. Sheriffs' forces and police departments in Georgia will do well to merit during the coming winter the compliment paid them by the national organization of tramps, who passed a resolution denouncing the severity with which laws against hoboes were enforced in this State. Georgia doesn't desire any more migratory or casual workers than she already has, and is perfectly willing for any now within her borders to migrate to some other place or to be less casual in their labor.

#### MEMPHIS AND COTTON.

[Memphis Commercial-Appeal.]

The statistics of cotton are romantic and drastic.

Cotton influences the money of the world as no other product. If you don't understand cotton, it may make you poor over night, and sometimes those who seem to know it best have ill-fortune when dealing in it.

The cotton crop at this the closing of the current cotton year shows some instructive figures.

Last year there were marketed in Memphis 604,000 bales, and this year there was marketed in Memphis only 473,000 bales. There was a fall off of 131,000, yet the fall off in money was only \$284,000.

Cotton during 1913 averaged \$65.71 a bale. During 1912 the average was \$51.89 a bale.

Cotton contracts during the last week advanced to a figure equivalent to about \$4 a bale. The present cotton crop, then, increased in price in one week more than the \$50,000,000 which Mr. McAdoo has set aside to bring it to market.

So far the Memphis territory has cause to rejoice. The prospects for a good crop this year in this territory are higher than at this time for many years past.

People interested in cotton are also hopeful for good prices, because there is no doubt that there has been a large deterioration in Texas, Oklahoma and in West Arkansas, because of the extreme dry weather.

We are sorry for the misfortunes of our western friends. It would have been better for all of us, probably, if there had been no deterioration in the crop anywhere.

But we should be grateful in this valley that the Lord sent us rains when they were needed.

We have had some bad luck in this territory during the last two years. We had a flood in 1912 and another in 1913, and some of our people in 1913 were overtaken in evil and exposed. Their transactions had a bad mental effect on the community. Then money got tight. A great many of the planters in the flooded territory last year were not able to re-

coup. All of these forces brought about a lean summer.

But the fall is here. The crop of the flood areas is good. Corn is better than usual.

Our bankers have practically completed arrangements to handle what cotton comes here, and we should enter the autumn of 1913 buoyant in a confidence which is based upon fundamentally sound conditions.

#### RESULTS OF GOOD ROADS DAYS.

[Birmingham (Ala.) News.]

Figures compiled by the Alabama Good Roads Association show conclusively that the concerted effort made in this State on August 14-16 in behalf of better highways was generously productive in its results. Here are some of the conclusions based upon reports received by the association from all parts of the State:

Estimated number of persons who voluntarily worked the roads, 75,000.

Value of work to State, based upon average of \$2 per day per man, \$450,000.

Estimated cost of teams engaged in work during the three days had they been hired, \$100,000.

Total cash value of work performed, \$550,000.

This is a magnificent showing, but the figures do not tell the whole story. There are some phases of the subject in the face of which figures become absolutely helpless. For instance, there is the element of enthusiasm. Who can measure its value? Who can put down in dollars and cents the far-reaching influence that the example set by 75,000 patriotic Alabamians on this occasion will have upon the growth of the good roads movement?

As a result of the showing made this year the Alabama Good Roads Association will repeat the performance in 1914, and probably every year thereafter. Moreover, it is going to petition the Legislature of the State to make these three days legal holidays, thus signifying their importance and enlarging the opportunity of those who feel inclined to contribute some of their time to the cause.

All of which means that Alabama is yet to become a Commonwealth as famed for the excellence of its highways as for the wealth of its resources and the devotion of its people.

#### VICIOUS AMENDMENTS.

[Charleston News and Courier.]

There is a great deal of truth in the indictment brought by Senator Cummings against the operations of the various produce and stock exchanges, and the scope of his amendment is undoubtedly far more logical than that of Senator Clarke of Arkansas. If Congress is going to undertake the regulation of dealing in futures, it should not restrict its attention to cotton alone. But Senator Cummings does not succeed in justifying the legislation which he supports any more than did Senator Clarke. He fails to explain, first of all, why the tariff bill should be chosen as the medium through which to launch such an assault upon the exchanges. More important still, he does not indicate why the taxing power should be employed for such a purpose as that to which he would pervert it.

That the cotton exchanges and the various other exchanges should be regulated for the protection of the public all are agreed—all, that is to say, who have no axe of their own to grind. But the reform methods urged by the Senators from Arkansas and Iowa do not commend themselves upon any grounds with which the public has been made acquainted. The fact is that they do not seek to reform, but to destroy, and yet for some strange reason

they persist in disguising their real purpose.

Why they should choose this plan of attack we do not know, but we are certain that the cotton growers of the South are at this time altogether unprepared for the destruction of the cotton exchanges. They have many and just grounds of complaint against these institutions, it is true, but the exchanges are yet indispensable in the present condition of the cotton business. Wipe them out and the grower will be at the mercy of the spinner, and the foreign spinner at that. If either the Clarke amendment or the Cummins amendment should become law, as matters stand now the cotton market in the South would be utterly demoralized. Buyers with no means of protecting themselves against a possible slump would of necessity be compelled to exercise the utmost caution. A heavy depression would almost certainly settle down over the entire cotton belt.

The day may come when, with a strong system of warehouses protecting them against the need of selling their cotton until such time as the laws of supply and demand have had full opportunity to assert themselves, the farmers of the South may be prepared for such an experiment as those who favor the abolition of the cotton exchanges propose. Nobody knows better than the Southern farmer that he is not ready now to take care of himself and hold his cotton at his pleasure.

On every account these amendments which have been offered by Senators Clarke and Cummins are vicious, and should be defeated. The Southern Congressman or Senator who supports them is assuming a heavy responsibility.

#### TEXAS RAILROAD EARNINGS.

[San Antonio Express.]

The increased earnings of Texas railroads during the last fiscal year furnish most convincing evidence of prosperity in the State.

Texas roads did an immense freight business last year, the revenues from which were nearly \$6,000,000 more than were derived from the same source during the preceding year. This increase amounted to about 14 per cent., a gain that should be as pleasing to the people of the State as to the companies operating the roads, inasmuch as it indicates the great volume of cotton and grain and vegetables and fruits and live-stock and feedstuffs and many other articles of commerce shipped from Texas, besides the large amount of supplies which were shipped into the State constituting a feature of trade more pleasing because of the fact Texas people had the money with which to buy than because they were not shipped out of, instead of into, the State.

Another item indicative of a prosperous condition of the people is the increased passenger earnings during the year. People may patronize the freight department of a transportation company to an important degree, even though they be not so prosperous, because they must buy and sell such things as are required to supply the necessities of life, but when money is scarce the fact is promptly illustrated by a falling off in the passenger receipts of the railroads. When money is scarce people do not travel except when it is necessary to do so, but when money is plentiful everybody travels. Therefore, increased earnings from the passenger departments of Texas roads amounting to about \$3,500,000, or a gain of something over 13 per cent., proclaims that Texas people had money last year to spend for millions of railroad tickets other than those which



they found it necessary to buy for business reasons.

When the people prosper the railroads prosper, and whatever impression may have gained currency to the contrary, it is none the less a fact that when the railroads are prosperous the people are prosperous also, because railroads cannot prosper unless the people prosper first. It is gratifying, then, to note that Texas roads are constantly increasing their earnings, because the fact made public assures the world that Texans are prosperous.

#### VIRGINIA APPLE RAISING.

[Norfolk Ledger-Dispatch.]

There certainly may be no denial of the statement that the person who grows good apples is a public benefactor. Like the raiser of bananas, he is producing a delicious food, which may be shipped to many parts of the world and add greatly to the store of good food for men.

The producer of foodstuff of any kind is doing the very best sort of work, but the grower of apples and bananas is nearly, if not quite, at the head of his class. The promotion of increased production of apples in Virginia is work in which the press may do very great work.

The publication in the newspapers of stories such as lately was printed in the Winchester (Va.) *Star* will do good, we believe. Every line of news about apple growing in Virginia which shall be published in other States or abroad will aid in advertising and stimulating this great industry.

The *Star* story recited some facts which show how large the apple growing industry in its section has come to be. It reported the sale of the crop of four growers to the representative of a St. Louis dealer for nearly \$55,000, the price for the best quality being \$3.50 a barrel.

The principal varieties are Ben Davis and York Imperial. The Albemarle Pippins, of which the *Star* said these growers produce many, are to fetch even a higher price. Incidentally, it is said that the crop of apples this year in that section will be but about one-third as great as it was last year, having suffered this season from frost, but the prices this year are nearly double that of last year, when \$1.75 was paid for such first-grade apples as sold now for \$3.50.

Those who have sold this season's crop in advance—E. V. Weems, Melvin Green, S. L. Lupton and James L. Robinson—are said to be the largest growers in Frederick county, Virginia, each picking from 2000 to 4000 barrels a year.

There appears to be opportunity to grow good apples at a satisfactory profit in the hill region of Virginia, and the increase of this industry will add greatly to the wealth of the State and the welfare of mankind.

#### SOUTHERN INDEPENDENCE.

[Knoxville Journal and Tribune.]

The people of the South do not want political independence; they take pride in the fact that they are a part of the great American republic, and are striving to become a much more consequential part. They are not striving in vain, either. Neither is it any longer simply a matter of faith. They have faith, but it is realized that faith without works is dead.

It is a pleasing fact that the Southern people are growing more and more ambitious for independence, but it is industrial and commercial independence that arouses their aspirations and their longings. It is a strange thing to say, but it is a fact, that while of the original 13 States, four of them were in the South, not counting Delaware and Maryland, and while many of the battles of the Rev-

olutionary period, including Yorktown, were on Southern soil, it has taken the people of this section more than a century to awake to the fact that the elements forming the foundation of great wealth are found here in the greatest abundance.

It took a hundred years to evolve the fact that a large proportion of the richest deposits of coal and iron were to be found in the Southern hills and mountains.

Only very recently have the Southern people been enlightened to the fact that they were the owners of soils which, for natural fertility and adaptability to the growing of a great variety of crops, were the equal, if not superior, to any in the country.

But one thing is necessary to the independence of the South, commercially and industrially, and that is to develop the resources of the section. Not so very many years ago there was not a cotton mill in the South worthy of the name. Now they are scattered all over the section, and are converting one of the section's raw material into the finished product in the greatest abundance.

The products of the mines of the South at a time within the memory of many yet living was nothing to speak of; now they are yielding values that, expressed in dollars, run well up into the millions. But it is just now that more active attention is being given to the products of the soil.

It is being realized and acted upon that while the South must do a large share of the work necessary to clothing the people of the world, it must also do a large part toward feeding the world.

Hence it is the South is on the road to industrial and commercial independence. If the South does not produce largely more than the Southern people need to consume, it will be the fault of the people here and not that of nature.

It may be added that the avenues opening the way to prosperity add to the strength of the cords that bind the section as an integral part of the great republic. Prosperity promotes loyalty and devotion to the whole union. It is realized that in union there is strength, and while the promotion of trade and industry makes men richer it also makes them lovers of the flag that floats so proudly over the land of the free and the home of the brave.

**Rules of Management.** By William Lodge. Published by the McGraw-Hill Book Co., New York. 140 pages. Price \$2.

The author's name is the best introduction to his book on the rules of management in industrial plants, since he is the president of one of the leading tool manufacturing companies of the country, the Lodge & Shipley Machine Tool Co. of Cincinnati. The book is the result of the author's effort to put in the form of rules and comment the knowledge obtained from his personal experience for the use of the manager succeeding him in his company. The duties and work of each department are outlined in detail. The instructions will be found applicable in many lines of machine building and an aid in continuing the progress being made in this and other lines of industry. Each subject is treated under one of the 34 chapters, and the subjects include not only the manufacturing part, but the sales and purchasing, shipping and distributing phases. The subject of pensions, which is assuming increased importance, is treated in the last two chapters.

Walton & Son of Rocky Mount, N. C., will establish a hosiery knitting mill at Statesville, N. C. They have the necessary machinery and a building.

#### Mineral Production in North Carolina in 1912.

During 1912 the North Carolina Geological and Economic Survey continued its co-operation with the United States Geological Survey in the collection of statistics of the production of all the minerals and ores (including clay products) which were mined in North Carolina during that year. These statistics will be published in connection with more elaborate data later in the year; but, on account of the immediate demand for the figures showing the production of the various minerals, these are given publicly in an abbreviated form in this press bulletin.

One of the most noticeable facts in looking over the statistics for 1912 is the great increase in the production of all the metallic minerals, as gold, silver, copper and iron; and the production for the first time in recent years in North Carolina of lead and zinc.

The bulk of the gold output was, as usual, derived from the Iola mine in Montgomery county, which increased its output considerably over that of any previous year. The silver is recovered as a by-product in gold milling or smelting of ores of gold, copper and lead.

Of the non-metallic minerals the production of clay products, building stones and mica increased enormously over previous years, there being an increase in value of \$224,796 in building stones in 1912 over the 1911 production. Of the clay products there was an increase of \$194,734, and mica, \$38,770. There was also some increase in the production of talc, pyrophyllite and feldspar.

There was a decrease in the value of the production of mineral waters, sand and gravel, precious stones and barytes. There was a small production of tin.

On the whole, it will be seen that the mining and quarrying industries of the State are increasing rapidly; that there was a very marked increase in the production of all the minerals which are found in large commercial quantities in the State, such as gold, silver, copper, talc, stone, mica, iron and clay products. Among the minor minerals, graphite dropped out again entirely, but there was a small production of coal.

#### Feldspar and Kaolin in the South.

An investigation of the mining and treatment of feldspar and kaolin in the Southern Appalachian region has been completed by J. S. Watts, quarry technologist of the bureau of mines, and published as Bulletin No. 53 of the bureau. Chas. L. Parsons, chief of the division of mineral technology of the bureau, makes the following statement as preface to the bulletin:

"Apart from the fuel and metal-mining industries of the United States, no one of the various branches of mineral technology is more important to our domestic economy than are the ceramic arts. Aside from the manufacture of crockery, household china and bric-a-brac, the development of the white-ware industry with reference to the production of plumbers' sundries, tile and faced brick is of the utmost importance to the country. Its development will have an increasing influence on fireproof construction and proper sanitation, and therefore will lessen our unparalleled fire losses and help conserve public health.

"According to statistics compiled by the United States bureau of foreign and domestic commerce, there were imported into the United States during the 12 months ending June 30, 1912, china and porcelain valued at \$9,515,851. In addition,

235,438 tons of kaolin or china clay were brought in to be manufactured into various forms of white ware. This kaolin displaced a like amount of domestic raw material, which, if properly handled, has no superior.

"The kaolin, feldspar and quartz industry of the United States is one of small operators, few of the mines being on a scale that warrants the employment of expert technical control. The extensive reduction of existing waste, the preparation of a standard product and the marketing of guaranteed material become possible only when the losses are understood and the just requirements of the purchaser are realized. This bulletin has to do with the primary source of material used in the manufacture of white ware, and especially with this material as it occurs in the Southern Appalachian region.

"Among other conclusions, Mr. Watts indicates that the raw material from the region studied has no superior for color, but that there is great need of some central deposit at which the output of many small mines may be mixed and graded under the supervision of a trained ceramic chemist. Such control would insure the manufacturer receiving a product of known physical constants and would also insure a constant and ready market for the product. Mr. Watts has further called attention to the large quantities of first-quality kaolin now thrown away in mica mining; to the loss, in washing kaolin, of many tons of valuable flake mica that might be easily recovered; to other of excellent quality not now utilized, and to the fact that there is exposed on the dumps and worked out dikes at least 200,000 tons of semi-kaolinized feldspar which, under proper technical control, might easily be utilized by potters.

"The bureau's investigations have already progressed far enough to show that there can be no doubt of the United States being fully able to supply nearly all of the kaolin required for domestic consumption, and that in quality the kaolin now available in the Appalachian region is excelled by none."

#### Natural Gas in Texas.

The quantity of natural gas produced from wells in Texas in 1912 was 7,470,373,000 cubic feet, valued at \$1,405,977, according to B. Hill of the United States Geological Survey. This is an increase over the production of 1911 of 1,966,980,000 cubic feet in volume and of \$390,132 in value. The greater portion of this gas was supplied for domestic purposes, the value of which aggregated \$906,412, or nearly double the value of the gas consumed in manufacturing and in generating power, which was \$498,665 in 1912. Some gas is used in Texas for brick manufacture. For the generation of power it is utilized in operating gas engines and boilers at water-works, ice plants, cotton gins, and largely in field work. The total number of gas wells in Texas at the close of 1912 was 87, of which 24 were drilled in 1912. The number of dry holes drilled was 23, and the number of gas wells abandoned 6.

#### Wants Wood Flooring.

I. C. Garber, McClelland Building, West Jackson, Miss., writes to the MANUFACTURERS RECORD as follows:

"I am in the market for approximately 6000 feet of quarter-sawn oak flooring and 1000 feet of maple flooring. I am in Jackson, Miss."

The New State Sheet & Overall Manufacturing Co., Oklahoma, will add a department for manufacturing knit goods, and has ordered the necessary machinery.

## RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### BRINSON RAILWAY NOTES.

#### Immediate Provision Made to Pursue Improvements as Projected.

The Brinson Railway Co., as a result of authority granted by the Georgia Railroad Commission to issue bonds, will, according to a report from Savannah, issue \$1,250,000 of 6 per cent. two-year notes and immediately sell the latter, the proceeds of which will be devoted to improvement of the property. The notes will be of \$100, \$500 and \$1000 denomination each. The immediate bond issue is for \$2,502,000, of which \$1,000,000 will be reserved to refund a former issue, and the remainder will be employed as collateral for floating debt and new construction. They are in denominations of \$500 and \$1000. They are dated August 1, 1913, and run 30 years. The total bond issue under the mortgage may be \$5,000,000.

It is expected that the Brinson Railway, which now extends from Savannah to St. Clair, Ga., 108 miles, connecting at the latter point with the Georgia & Florida Railway, will build an extension from St. Clair to Athens, Ga., about 100 miles. An extension of 12 miles from Waynesboro to St. Clair was recently completed. The present line is to be improved, as heretofore published. James Imbrie of New York is chairman and John H. Hunter of Savannah is president.

### \$1,000,000 RICHMOND DEPOT.

#### New Union Station Design Adopted and Construction Begins as Soon as Possible.

It has been finally decided by the Richmond, Fredericksburg & Potomac Railroad and the Atlantic Coast Line to erect a new union station at Richmond, Va., and plans for it will be prepared immediately, the design for the structure submitted by John Russell Pope, 527 Fifth avenue, New York, having been accepted and approved after consideration in comparison with several other designs. Bids will then be invited. The edifice is estimated to cost about \$600,000, and will be built of limestone, brick, concrete and steel in the classic Roman style, a prominent feature of the front being six tall columns. About \$1,000,000 will be the entire cost of the new terminal, including trackage, etc., but exclusive of the cost of land. It will be situated on West Broad street, upon the site now occupied by the baseball park and the Hermitage Golf Club. Construction will begin as soon as possible.

The station will be five stories in height,

and will front 244 feet on Broad street, the depth of this headhouse being 108 feet. Behind this will be the passenger concourse, 65 feet deep and 290 feet wide. This will be open on each end of its greatest dimension, so that exits will be made upon each side of the headhouse or main building. A special building 200x50 feet will be erected for baggage, mail and express rooms. There will be seven tracks, and the passenger platforms, 1000 feet long, will be 20 feet wide. Twelve trains can be accommodated simultaneously in the station. Provision will be made for additional tracks and platforms. The general waiting-room will be 105x57 feet, and it will open directly upon the driveway. The women's waiting-room will be 31x28 feet in addition to the toilet-rooms. The men's smoking-room will be of equal size on the other side of the station. A waiting-room for colored people is also to be provided. It will be 51x46 feet in size. The main restaurant will be 53x45 feet, and will accommodate more than 100 guests. A lunch counter will be run in connection with it. The kitchen will be in the rear. Ticket offices will be conveniently placed between the two general waiting-rooms and the rooms for baggage, parcels, telegraph, etc., will be situated so as to be readily reached. Two passenger elevators will run to the upper floors, which will be occupied as railroad offices. Excellent arrangements are planned for lighting and ventilation. The tracks will be upon the ground floor, so that passengers will not have to use either stairways or elevators to reach the trains.

### New Equipment.

International & Great Northern Railroad has ordered 3 oil-burning locomotives of the Consolidation type from the American Locomotive Co.

Grafton Traction Co., Grafton, W. Va., is reported in the market for street cars.

Seaboard Air Line's recent purchases of equipment are rehearsed in a mortgage which is being filed in the South, thus: 35 Pacific type freight locomotives, 5 Pacific type passenger locomotives, 5 six-wheeled switching locomotives, 1 dummy steam motor, 250 flat cars of 80,000 pounds capacity, 250 hopper coal cars and 2 all-steel six-wheeled 70-foot express cars, all of this equipment to be delivered by the end of this month, deliveries having begun in August; also 500 ventilated box cars to be delivered in November, 5 dining cars for delivery in December and 10 all-steel coaches for delivery next April.

Southern Railway's 1913 equipment purchases are described in a mortgage just filed in North Carolina as follows: 15 Mikado type freight locomotives, 10 Pacific type passenger locomotives, 800 double drop bottom steel gondola cars of

50 tons capacity; 420 steel coal cars and 500 hopper bottom cars of 50 tons capacity; 150 stock cars of 30 tons capacity.

### Oklahoma City to Childress.

A charter has been granted to the Oklahoma, Mexico & Pacific Railroad Co., with temporary offices at Cordell, Okla., and permanent headquarters at Oklahoma City, to build a line from the latter point to Childress, Tex., about 180 miles, connecting there with the Fort Worth & Denver City Railway. The route will be via Colony, Sentinel, Dill City, Mangum, Hollis and other places. Giddings & Giddings of Oklahoma City and Duff & Masengale of Cordell are attorneys for the company, the officers of which are Joseph E. Kirkes, president and general superintendent; Dr. J. E. Farber, first vice-president; J. T. Hines, second vice-president; O. S. Rice, secretary-treasurer, and E. B. Ross, chief engineer.

It is said that the road will traverse a strip of country 40 miles wide through which no other railroad passes. It is a very fertile section, and embraces part of the Washita Valley. On cattle shipments from important ranches in the northwestern part of Texas it is claimed that five hours will be saved to Oklahoma City. Plans for the railroad were made several years ago, but were not pushed until after the recent amendment of the State Constitution removing features which were objectionable to many promoters of new railroad enterprises.

### Kansas City Stockyards Railway.

The Kansas City Connecting Railway Co. has been organized by the Kansas City Stockyards Co., and is making improvements, which, according to a report from there, will build connections to lines not now directly connected with the stockyards and will also build extensions of the present switching tracks. The new company will handle all cars over the stockyards tracks which have heretofore been handled by the individual railroads. It is said that ultimately electric locomotives will be employed. According to a local statement, it was proposed to spend altogether about \$1,500,000, but this is officially denied, a telegram from the stockyards company saying the report is overdrawn.

### Railroad Story of the Ohio Floods.

"The 1913 Flood and How It Was Met by a Railroad" is the attractive title of a booklet written by Lewis S. Bigelow and issued by the Pennsylvania lines from their general offices at Pittsburgh. It is a most interesting story of the Ohio freshets in March last, which, owing to extraordinary rains within a few days, caused rivers to burst their banks and wreak widespread damage not only to

various railroads, but to much private property. The daily history of the flood was told in the press dispatches at the time, so that people generally are fairly familiar with its principal features, but the booklet presents numerous facts of importance which heretofore escaped observation, accompanying them with illustrations affording an adequate conception of the terrible force of the waters. The history of the flood from its incipency is related, so that the readers may realize how it came about so swiftly and caused so much loss. The railroad company has also issued a leaflet describing with illustrations how passengers were rescued from train No. 600 near Stanleyville, O.

### Memphis & Pensacola Resumes Work

A report from Meridian, Miss., says that the Memphis & Pensacola Railroad Co. has been virtually reorganized there. W. P. Dickinson of Chicago resigning as president and being succeeded by John Cluney, a lumber merchant of the same city. It was decided to increase the capital stock from \$1,000,000 to \$15,000,000. McBeath & Miller, attorneys, of Meridian, will immediately take steps to amend the charter accordingly. Several of the directors departed after their meeting for Pensacola to resume construction of the road in order to save the franchise, and a report from there says that work has again started. It is further stated that George A. Yuille of Chicago has resigned as a director.

Others present at the meeting in Meridian were J. H. Sullivan of Memphis, Tenn.; S. W. Jones and J. M. McBeath of Meridian; Delevor B. Cole and A. A. Rolf of Chicago. Byron H. Joy of Chicago succeeded Mr. Yuille as a member of the board. Mr. Joy and associates are to take charge of the construction.

### Earnings of Texas Roads.

A report published by the Texas Railroad Commission shows that the freight revenues of the lines in that State increased during the 12 months ended June 30 about 14½ per cent., the figures this year being \$79,165,605, which is \$9,914,001 more than during the year ended June 30, 1912. Passenger train revenues were \$34,055,184, an increase of \$3,478,196, or well-nigh 11½ per cent. Total operating revenues were \$115,422,396, as compared with \$101,814,619 last year, the percentage of increase being 13½. Operating expenses increased a little more than 11½ per cent.

### Western Maryland's New Pier.

The first oceangoing vessel to dock at the new open pier of the Western Maryland Railway at Baltimore is the steamship Erodiad, which runs between Baltimore and Italian ports. She docked on



UNION STATION TO BE ERRECTED AT RICHMOND, VA.



September 2 with a cargo of manganese ore consigned to the National Carbon Co. Before the construction of this additional pier cargoes of ore and merchandise have been handled at the Port Covington terminal by means of lighters. Now the ships will be alongside of the pier and transfer their cargoes directly to shore. The pier is equipped with facilities for rapid loading and unloading. The manganese ore will be carried West over the Western Maryland and the New York Central lines.

### Proposed Oklahoma Railroad.

Col. C. C. Godman, Fort Smith, Ark., says: "I have under consideration the building of a line from Poteau to Rock Island connection at Monroe; also extending from Poteau north to Bokoshe, Okla., and there connecting with the Midland Valley and the Fort Smith & Western railroads; then on over to Cowlington, an inland town in a beautiful valley with no railroads, the entire distance being about 45 miles, all of which is now being favorably considered. The people seem to want I should build this road, my having built six roads in this country during the past 15 years and made my every promise good to the people."

### Columbus to Augusta, Ga.

R. L. Williams, Jr., Macon, Ga., says that his proposed railroad from Columbus to Augusta would not pass through Macon, but would run via Talbotton, Thomas, Forsyth, Juliette, Hillsboro or Monticello and Eatonton; thence to either Camak or Union Point, Washington and Appling and Augusta. The matter is in rather indefinite shape at present, but he wishes to give it sufficient publicity to invite serious consideration, firmly believing that it will materialize within a few years. The territory the line would traverse is ample for its support, and is capable of great development.

### Tennessee & Kentucky Interurban.

The Tennessee & Kentucky Railroad Co., capital \$10,000, has applied for a charter to build a line from Nashville to Springfield, Tenn., and Adairville and Russellville, Ky., about 50 miles. Either electricity or compressed air, or both, are to be used for motive power. The incorporators are J. P. Helms, Alfred G. Merritt, Jr., H. L. Sperry, Paul D. Fenton, B. F. Cornelius, R. W. Bratton, J. C. Collins, Clyde Shropshire, J. L. Weakley, J. W. Tilford and A. C. Ferris of Nashville.

### Railroad Notes.

J. B. Mixson, Jr., has been appointed soliciting freight and passenger agent of the Winston-Salem Southbound Railway, with headquarters at Winston-Salem, N. C.

John W. Hancock, general manager of the Roanoke Railway & Electric Co., has, it is reported, also been elected general manager of the Lynchburg Traction & Light Co., and will divide his time between these two Virginia cities to care for the respective properties.

### To Develop 20,000 Horse-Power.

The Tennessee Utilities Co., G. M. Whitson, president and associate engineer, Tullahoma, Tenn., is planning to construct a hydro-electric plant on Elk River developing 20,000 electrical horse-power for transmission. All surveys have not been completed, and the company will not be ready for bids before November 1. This company's incorporation was recently mentioned.

## GOOD ROADS

### WEEK'S HIGHWAY RECORD.

#### Progress in Southern Road and Street Improvement.

[Further details of highway undertakings and bond issues mentioned below are given under the headings Construction Department and New Securities, published elsewhere in this issue.]

#### Bonds Voted.

Austell, Ga.—City voted \$5000, bonds to improve streets.

Bishop, Tex.—City voted \$14,000 bonds to build road and improve streets.

Boonville, Mo.—City voted \$25,000 street-improvement bonds.

Bullard, Tex.—Bullard District of Smith county voted \$30,000 bonds to construct roads.

Marianna, Fla.—Jackson county issued \$100,000 road-construction bonds.

Sanford, Fla.—City voted \$50,000 street and sewer improvement bonds.

#### Bonds to Be Voted.

Hempstead, Tex.—Road District No. 5 of Waller county votes September 25 on \$15,000 bonds for road construction.

Plaquemine, La.—Road District No. 2, Iberville parish, votes September 22 on \$46,000 bonds to construct roads.

Port Lavaca, Tex.—District No. 3, Calhoun county, votes September 20 on \$5000 road bonds.

#### Contracts Awarded.

Baltimore, Md.—City awarded \$32,497.50 contract for bituminous concrete paving.

Chattanooga, Tenn.—City awarded \$12,446 contract for street paving.

Columbus, N. C.—Polk county awarded contracts for constructing 50 miles of sand-clay road about 20 feet wide.

Kansas City, Mo.—Jackson county awarded \$7930 contract to rebuild three miles of road.

Laredo, Tex.—Webb county awarded \$22,776 contract to construct road.

Louisville, Ky.—Board of Public Works awarded \$24,600 contracts for street paving.

Parkersburg, W. Va.—City awarded \$67,210 contracts for street paving.

Waco, Tex.—City awarded \$34,845 paving contract.

Wheeling, W. Va.—City awarded \$2966 paving contract.

Wise, Va.—Wise county awarded contract to construct 10 miles of road.

#### Contracts to Be Awarded.

Baltimore, Md.—City awarded \$140,097 contracts for street paving.

Bentonville, Ark.—Benton county will expend \$23,000 for road improvements.

Natchitoches, La.—City receives bids until September 9 to pave or gravel 40,000 square yards of streets.

New Orleans, La.—Highway Department, Board of State Engineers, receives bids until September 8 to construct 12 miles of highway.

Raleigh, N. C.—City receives bids until September 8 to pave 30,000 to 40,000 square yards asphalt macadam or asphalt concrete.

Rockville, Md.—Montgomery county receives bids until September 16 to build 28,444 feet of road.

Washington, D. C.—City receives bids until September 8 to grade certain streets; 23,000 cubic yards.

#### Bee Supplies.

Rafael Collazo, Jr., P. O. Box 435, Playa-Ponce, P. R., writes to the MANUFACTURERS RECORD as follows:

"I am interested in obtaining a few addresses of bee supplies manufacturers."

## TEXTILES

### Sisal Hemp in Florida.

Referring to its recently-mentioned plant, the Sisal Hemp & Development Co. of St. James City, Fla., writes to the MANUFACTURERS RECORD as follows:

"Dimensions of main building, 210x90 feet; side buildings, 145x25, 35x15 and 25x45 feet, with outbuildings; blacksmith shop, 30x40 feet, and pattern shop, 30x40 feet; construction of concrete; Kahn system of plastered wire lath, practically fireproof. Approximate cost of machinery installed, \$200,000; amount of horsepower, 300; number of acres hemp planted, 160; probable production, 1500 pounds per acre; total number of acres to be planted by the company, possibly 3000."

### Wool-Pulling Plant.

Armour & Co. have established an additional department to their facilities at Kansas City. This department is installed in a five-story building which has been remodeled and equipped with machinery for separating wool from the sheepskin and preparing both wool and skin for further treatment into various kinds of marketable wool product. It is reported that about \$100,000 has been invested for the machinery, 5000 skins to be the daily capacity. The product will be assorted into different grades and otherwise prepared for the loom.

### Rebuild Absorbent Cotton Plant.

The Southern Aseptic Cotton Co., Columbia, S. C., will rebuild its absorbent cotton plant recently burned at a loss of \$50,000, and has awarded contract to the Seastrunk Contracting Co., Columbia, to reconstruct the building. Much of the machinery for manufacturing was not damaged by the fire, but wherever necessary it will be replaced.

### To Invest \$50,000.

The Holston Manufacturing Co., Lenoir City, Tenn., will erect a one-story 200x60-foot brick building and install a complete hosiery knitting equipment at Morristown, Tenn. It is reported that the investment will be \$50,000.

### Textile Notes.

Fidelity Hosiery Mills, Newton, N. C., will enlarge plant.

The Capps Cotton Mills, Toccoa, Ga., will add 2000 spindles and has ordered this machinery.

Ralph Morrison, Laurel Hill, N. C., will, it is reported, organize a company to build a 4000-spindle cotton-yarn mill.

## MECHANICAL

### Powerful Precision Testing Machine.

A powerful precision testing machine, said to be the largest ever built of the kind, has recently been installed at the United States Bureau of Standards, Washington, D. C., for testing columns, blocks, beams, girders and other shapes of steel, iron, wood, concrete, reinforced concrete, etc., in order to determine the breaking strength, the spring under load and other valuable engineering data. It is able to take specimens of any length up to 34 feet, and can exert a pull of 1,150,000 pounds, or a crushing force of 2,300,000, and yet is so delicate that the pressure of the finger upon it will be registered.

The machine consists of two main parts connected by two enormous screws. One part is stationary, and contains the mechanism by which the force exerted on the specimen is measured. The other part,

called the press, is movable, and consists essentially of a hydraulic cylinder mounted on wheels. The head of the hydraulic piston is mounted on wheels of its own, and can move independently of the cylinder. The oil, which is used to produce the hydraulic pressure, is supplied through a pipe which telescopes or elongates as the press is moved.

In testing the press is moved to the proper point, depending on the size of the specimen, by a Westinghouse motor supplied by the Westinghouse Electric & Manufacturing Co. of East Pittsburgh, Pa. The specimen is then put in place, being gripped by jaws mounted on each of the ends of the testing machine if it is to be put under tension, or held between two heavy plates if it is to be compressed. The hydraulic piston is then slowly forced forward or pulled back, depending on whether the test is of compression or tension, until the specimen under test is ruptured.

A Deane pump driven by a 20-horsepower Westinghouse motor, which supplies the oil for operating the hydraulic cylinder. This pump is capable of delivering oil at a pressure of 3500 pounds per square inch, and was supplied by the Deane Steam Pump Co., Holyoke, Mass.

### Asbestosteel for Roofs and Walls.

To meet the demands for steel sheets in the construction of roofs, walls and other features of buildings in which such material must be protected from corrosion, the Asbestos Protected Metal Co. of Beaver Falls, Pa., protects steel structural sheets by the application of a coating of asphaltum and final finish of asbestos felt, both processes being carried on under patents owned by the company. The product thus made is known as "Asbestosteel."

By this means sheet steel is protected from corrosion without sacrificing any of the advantages inherent in corrugated sheets, and asbestos protected metal has now been used in actual construction under conditions that prove its lasting qualities. It may also be used as a combination reinforcement and structural element in connection with concrete in the highest class of permanent structures. In such construction the asbestosteel serves as a self-centering form for the concrete covering, also as finished ceiling requiring no back plastering, and as the chief strength-contributing member of the construction. Steel wire reinforcement may be placed in the concrete to prevent temperature cracks. The concrete when applied fills and strengthens the corrugations, distributes the load and provides a suitable surface. The metal alone forms a permanent structure which will not be injured by exposure, so that if desired, the concrete or plaster may be applied whenever the time is convenient after the metal structure is in use.

The wide use and possibilities of construction by means of asbestosteel are illustrated in bulletin 53 recently issued, and a number of completed structures are shown. Among these is the large powerhouse of the Amalgamated Phosphate Co., Chicora, Fla., in which the roof, walls and partitions are made of asbestosteel. Other buildings in the South shown are the stations of the Washington & Alexandria Railroad at Alexandria, Va., and at Arlington Junction, Va. Different forms of construction with asbestosteel are described and illustrated in detail, and extensive buildings in various parts of the country are shown.

### Redman Concrete Hollow Wall Buildings.

The importance of the development of concrete building to the point where a

residence or other structure may be erected at a cost approximating that of a frame building of the same dimensions is widely recognized.

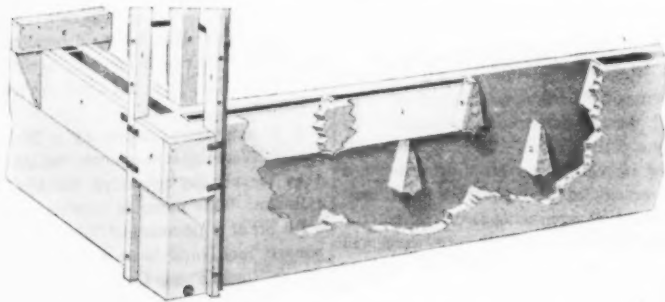
In the patent hollow wall system of W. T. Redman, Brentwood, Md., the inventor has produced a form of construction which is claimed not only to meet this element of cost, but to produce a building possessing advantages of negligible repair and painting cost, a building that is fireproof, dampproof, heat and cold proof.

The form of construction is shown in the illustration. It has been developed from experiments for a number of years in bringing out a hollow concrete wall to replace the more costly solid wall and to

dences have already been built by the process, and it is reported with successful and entirely satisfactory results. The inner walls of such a building only need to be finished in smooth white plaster or painted any color preferred, and the outer surface of the building may be finished in pebble-dash, stucco or other surface.

#### Hall-Scott Gasoline Railway Motor Cars.

The increasing use of motor cars of various types for railway operation, particularly on suburban and interurban lines, presents a wide field for the development of motive power apparatus. The motor car shown in the accompanying illustration is propelled by gasoline en-



REDMAN MOLDS AND CORES WITH SECTION OF HOLLOW CONCRETE WALL.

take the place of the less fireproof frame buildings.

A 10-inch concrete hollow wall has 4½ inches of air space, admitting circulation from bottom to top. It may be reinforced by occasional horizontal rods, or to any extent desired. One cubic yard of concrete will make 54 square feet of 10-inch wall, and two men can mix and place four cubic yards per day using these forms. The cores and molds are placed on top of the rising wall; a galvanized-iron cover is placed over the opening of core forms, and the concrete is poured into the molds around the core. End wedges hold the cores apart at proper position and a form holder keeps the mold boards from opening outward when pouring concrete. When the pouring for the day is completed and the concrete has set over night,

gines, and is built by the Hall-Scott Motor Car Co. of San Francisco, Cal. This car is known as the Hall-Scott M-6 type, and was built for the Holton Interurban Railroad, Redlands, Cal., and is now in service.

The car is of steel construction throughout. Frame, body, trucks and power plant were designed and built at the Hall-Scott Motor Car Co.'s plant in West Berkeley, Cal. It is 60 feet long over end sills, and has a seating capacity of 64 passengers in the main passenger compartment. The baggage-room is 16 feet long, and equipped with lift wall seats accommodating eight additional passengers. Express and mail may be carried in the engine-room, where a space of 12 feet long by 3 feet wide is available. The total weight of this car is 67,850 pounds. From



INTERURBAN CAR WITH GASOLINE MOTOR.

the same forms are used for the next tier of concrete. The forms are from 12 inches to 2 feet in height and are made either of wood or steel.

The lower course is provided with a small drain, as shown in the illustration, by which any moisture accumulating is drained off and not allowed to lie in the wall. The work of building with these forms is so simple that the maker of the forms claims that any house builder or concrete worker can quickly learn to use them successfully. When sand and gravel are at hand, it is believed that buildings may be erected at even less cost than with frame construction. A number of resi-

December, 1912, to June, 1913, the car made an average of 2214 miles per month at a total operative cost per mile of 13.4 cents.

It is equipped with the type M-6 standard railway motor of 150 horse-power, 6 cylinders of 8-inch bore by 10-inch stroke. The motor has two systems of ignition; the Bosch high-tension magneto and the Atwater Kent Unisparker, serving two separate sets of spark plugs. The carburetor is of Hall-Scott make, and is especially constructed for the motor to give a maximum of flexibility with minimum fuel consumption. Connection from the engine to the rear truck is made by means

of a shaft in two sections. The transmission is carried on the front axle of the rear truck. It is of the selective gear type, allowing four speeds in either direction. All transmission gears are of steel forgings, cut and hardened. The transmission case is oil and dust proof. A diamond roller chain connection between the axles of the rear truck gives a four-wheel drive, which allows of tractive effort sufficient to handle 250 tons of trailer cars on a level track.

The speed range is from 4 miles up to 60 miles per hour. This flexibility of speed control permits the successful handling of freight cars and yard switching. The operating levers are placed on the

a distinct advance in the method of unloading logs from cars.

The action is shown in the accompanying illustrations. The purpose sought to be accomplished is to quickly release the load of logs from the car without the necessity of sending an attendant in to stand in the path of the logs and cut the stakes. By means of the new device the confining stakes are freed by the pulling of a lever at the end of the car. This unlocks all the stake pockets simultaneously on one side of the car, and thus eliminates the danger that would exist where men are required to cut the stakes and get out of the way of the falling timber.

Besides this advantage, time is saved



LOGGING CAR READY TO BE UNLOADED.

right-hand side of the motor car, in a position convenient for the operator, being similar in their functions to automobile practice. Engine cooling is by means of a vertical copper tube radiator in connection with a large fan driven by belt at constant speed, irrespective of the car speed. A 75-gallon storage gasoline tank is installed under the car frame and connected with the carburetor by means of a power-driven gasoline pump. The car is equipped with Westinghouse automatic airbrake system; a double-cylinder water cooled air compressor, directly driven from the main engine, furnishing air storage,

which would be required to cut six or eight stakes on the side of a car; also the stakes are rendered unfit for further use after being chopped off, and they are thus saved by the use of the safety stake pocket.

The new device operates by releasing the bottom of the stakes, so that the logs begin their movement toward the waters of the log pond instantly upon the release. The advantages claimed for the new device by the owners are that an occupation of great risk is freed from danger; the unloading of a train of logs may be accomplished in a minimum of time, thus



SAFETY STAKE POCKETS TRIPPED BY LEVER AT END OF CAR.

An electric generator, also driven from the main engine, charges the storage batteries for lighting and starting the main engine. Besides the electric starter, the engine is equipped with release cams for hand starting.

#### Logging Car Safety Stake Pockets.

A demonstration of a new safety stake pocket for use on logging cars was recently made at the plant of the Greenleaf Johnson Lumber Co., Norfolk, Va. It is stated that the demonstration was thoroughly successful, and that those witnessing it expressed their opinion that the new safety stake pocket will accomplish

giving the railroad prompt return of its cars and the mill immediate use of the logs; the six or eight stakes on each side of the car are saved for further use.

S. W. Lyons, Jr., secretary of the Chesapeake Building Association, Norfolk, Va., is developing this patented equipment, and states that the device has been viewed and passed upon favorably by the master car builders of two railroads entering Norfolk, and by two inspectors in the employ of the Interstate Commerce Commission. It is planned either to have it manufactured on a royalty basis or to organize a company for the manufacture and distribution.



# Construction Department

## TO OUR READERS!

In order to follow up properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "it is reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

### HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be shown on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur.

### WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$25 per year. On all advertising contracts in the Manufacturers Record for three months or longer a subscription to the Daily Bulletin is included for the contract period.

### BRIDGES, CULVERTS, VIADUCTS

Ky., Corbin.—City will have plans prepared for steel bridge over Lynn Camp Creek at Center St. Address The Mayor.

Ky., Lexington.—Louisville & Nashville R. R., W. H. Courtenay, Chief Engr., Louisville, Ky., let contract Foy-Proctor Co., Nashville, Tenn., at \$52,000 to build viaduct. (Lately noted.)

La., Maringouin.—Iberville parish will construct steel bridge across Bayou Grosse Tete; cost not to exceed \$400; W. A. Hollaway, Prest. Police Jury, Plaquemine, La.

La., New Orleans.—W. J. Hardee, City Engr., will prepare plans for bridge over entrance to Southern Yacht Club pen; Strauss Bascule Bridge Co. to superintend construction.

Md., Mt. Winans.—Pennsylvania R. R., Alex. C. Shand, Ch. Engr., Philadelphia, and State Roads Commission, Garrett Bldg., Baltimore, agreed upon construction of bridge over grade crossing of Washington Blvd. at Mt. Winans and small bridge over stream near crossing; larger bridge to be 66 ft. clear over all, with 24-ft. driveway and 6-ft. sidewalks; railroad will build both structures and Roads Com. approaches to larger one; estimated total cost \$80,000.

Miss., Jackson.—City Commissioners let contract Luton Bridge Co., York, Pa., at \$247 and \$327, respectively, to build two 90-ft. reinforced concrete bridges across Town Creek; M. L. Culley, City Engr. (Call for bids lately noted.)

Mo., Kansas City.—Board Public Works let contract Graft Construction Co., Seattle, Wash., at \$593,624.48, build 12th St. trafficway viaduct; reinforced concrete, 2644.51 ft. long, from west bluffs over railroad yards and tracks to West Bottoms; Curtis Hill, City Engr. (Previously noted.)

Mo., Maryville.—Polk township, Nodaway county, will construct cement culverts and bridges; \$50,000 available; John Clary, County Engr. (Lately noted, under "Roads and Streets," as having voted \$50,000 bonds for road construction.)

N. C., Mocksville.—Commissioners of Davie and Forsyth counties decided to build \$25,000 iron bridge over Yadkin River at Hall's Ferry on road between Mocksville and Winston-Salem. (Lately noted.)

Okla., Chickasha.—Grady County Commissioners contemplate constructing 5 bridges in Tabler and Tuttle townships; will soon invite bids.

Okla., Temple.—Cotton County Commrs., Walter, Okla., let contract West Texas Bridge & Construction Co. to construct steel bridge across Red River; length 1700 ft.; double driveway.

Tenn., Centerville.—Hickman County Commrs. authorized bond sale for bridge to be built across Duck River connecting Centerville and Shipp's Bend; cost \$17,500. (Previously noted.)

Tex., Byers.—Ninety-eighth Meridian Bridge Co. let contract West Texas Bridge & Construction Co. to build 3-span suspension bridge 1700 ft. long across Red River.

Tex., Sherman.—Grayson County Commrs. let contract Western Bridge Co. to build 6 steel suspension bridges; total cost \$25,000.

W. Va., Ronceverte.—Chesapeake & Ohio Ry., F. I. Cabell, Ch. Engr., Richmond, Va., will build bridge at Chestnut St.; steel;

W. Bailey, Secy.-Treas.; erect plant; specifications not approved; also erect plant at De Quincy, La. (See "Machinery Wanted.")

Tex., Crisp.—Bricks.—Crisp Pressed Brick Co. organized; W. P. Allen, Prest.; Ben Allen, V.-P. and Treas.; J. P. Sims, Mgr.; succeeds Ennis-Crisp Press Brick Co. (Recently noted incorporated, \$30,000 capital.)

Tex., Beaumont.—Bricks.—A. F. Daunoy, Lake Charles, La., contemplates organizing company with \$30,000 capital stock to build plant; daily capacity 50,000 bricks; cost \$25,000.

Va., Crofton.—Bricks.—C. C. Cocke advises is organizing company to manufacture bricks. (See "Machinery Wanted.")

### COAL MINES AND COKE OVENS

Ala., Piercetown.—Pierce Development Co., Y. Mott Pierce, Prest., Bridgeport, Ala., advises is opening new mine on Fork Mountain; proceeding with building 8-mile extension of 11-mile narrow-gauge road; contemplates installing power plant, electric haulage and electric mining machines; J. D. Austin, construction engineer; Dr. F. D. Pierce, Mgr. of this company and Prest. and Mgr. of Pierce Coal & Lumber Co. (subsidiary), states acreage is 25,000; daily output of mines 500 to 1000 tons when fully developed. (Recently incorrectly noted.)

Ark., Russellville.—Acme Anthracite Coal Co. organized; B. V. Lewis, Prest.; J. C. Humphrey, Secy.-Mgr.; will develop 40 acres; present daily capacity 20 tons coal; J. E. Brock, engineer in charge; lately noted incorporated. (See "Machinery Wanted.")

Ky., Hazard.—Hazard-Dean Coal Co., S. Davis Hughes, Supt., is constructing plant; daily capacity 600 tons coal; construct 1/2-

Ark., Vanndale.—Farmers' Union Gln & Mill Co., J. C. Hefley, Prest., will erect gln, meal and feed mill; 22x42 ft.; 2 stories; fireproof; W. H. Wolf, engineer in charge; bids opened Aug. 25. (Lately noted incorporated, \$3750 capital stock.)

Miss., Greenwood.—Leflore Compress & Storage Co. organized; S. F. Jones, Prest.; E. R. McShane, V.-P.; D. E. Nichols, Secy.-Treas.; J. H. Robinson, Mgr.; erect sheds 400x550 ft. and open platforms; storage capacity 12,000 bales without tiering; cost \$50,000; install 80-in. Webb compress; cost \$23,500. (Lately noted incorporated, capital \$75,000.)

Tex., Larue.—Miller, Gentry & Costlow will rebuild gln burned at loss of \$600.

Tex., Richardson.—Huguley Gln Co., capital stock \$500, incorporated by E. P. Huguley, Richardson; E. A. Huguley, Plano, Tex.; Charles B. Barry, Dallas, Tex.

Tex., Roaring Springs.—Quannah Cotton Oil Co., J. W. Simmons, Jr., Prest., Quannah, Tex., has partially completed gln; cost \$10,000; W. R. Baughn, Engr. in charge. (Mr. Simmons and others recently noted to build gln.)

Tex., Thorndale.—New Gln Co., capital \$12,000, incorporated by H. R. Kennedy, W. C. Phillips and M. A. Johnson.

### COTTONSEED-OIL MILLS

Tenn., Memphis.—Memphis Cotton Oil Co. increased capital stock from \$80,000 to \$125,000.

### DRAINAGE SYSTEMS

Ark., Walnut Ridge.—Running Water Drainage Commission let contract Peter Feldheiser & Son, Marigold, Miss., to construct canal; 17 miles long; one lateral 1 1/2 miles long; total 402,000 cu. yds.; cost \$35,000. (Call for bids lately noted.)

Fla., West Palm Beach.—State let contract Ben Johnson & Co., Miami, and Furst-Clark Construction Co. (main office, 1515 Fidelity Bldg., Baltimore, Md.) to construct West Palm Beach State drainage canal, which will afford continuous open water way from Lake Okeechobee to Lake Worth and West Palm Beach; former company will dredge canal from Lake Worth to edge of glades west of Lake Clark, and latter from there to Lake Okeechobee; total length 42 miles; width at top 80 to 100 ft.; depth from 9 to 10 ft.; dredge 6,000,000 cu. yds. material; estimated cost \$500,000.

Mo., Poplar Bluff.—Inter-River Drainage District Commrs. arranging to construct drainage system to reclaim land in Butler county between St. Francis and Black rivers; L. R. Thomason, counsel.

S. C., Anderson.—Z. C. Ballentine and others are interested in draining 1200 to 1500 acres marsh lands; recently noted. (See "Machinery Wanted.")

### ELECTRIC PLANTS

Del., Wilmington.—Southwestern Cities Electric Co., capital stock \$6,000,000, incorporated by Herbert E. Latter, Norman P. Coffin and E. B. Davis. Address care Corporation Trust Co. of America, Dupont Bldg.

Ky., Campbellsville.—Campbellsville Water & Light Co. organizing to construct electric light plant and water-works.

Md., Baltimore.—Consolidated Gas Electric Light & Power Co., Lexington and Liberty Sts., will expend \$500,000 for extensions and improvements to power plant at Westport, including boiler-house with complete equipment for coal-handling apparatus, stokers, pumps and heaters; stacks to be 29 ft. inside diameter and 250 ft. high; first installation to consist of six 1000 H. P. boilers equipped with automatic stokers; let contract for turbo-generator of 20,000 H. P. (Previously noted securing authority from Public Service Co. to issue \$900,000 bonds for improving electric and gas plants.)

Md., Cambridge.—Cambridge Gas, Electric Light & Power Co. contemplates constructing transmission line 18 miles long and installing additional equipment in power plant.

Mo., Ava.—J. W. Pettit petitioned City Council for franchise to construct electric light system.

Mo., Carthage.—Board Public Works contemplates purchasing boiler room coal weigh-

## PROPOSAL ADVERTISEMENTS

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PUBLISHED ON PAGES 90 and 91:

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concrete pillars 18 ft. apart; 16-ft. clear roadway; 3-ft. sidewalk; has specifications.

W. Va., Wellsburg.—Brooke County Commissioners let contract Luton Bridge Co., York, Pa., build concrete bridge over Castleman's Run in Buffalo Dist.; 84-ft. span; roadbed 14 ft. wide; cost \$30,230.

### CANNING AND PACKING PLANTS

Ala., Montgomery.—Wm. D. Edwards, Portland, Ore., considering establishing plant to dry and preserve fruits.

Fla., Pensacola.—A. T. Hardull and others interested in establishing cannery and creamery; propose organizing company with \$16,000 capital; daily capacity cannery 10,000 cans, and of creamery 500 gals. milk.

La., Ebenezer.—Ebenezer Canning Co., capital \$500, incorporated; J. V. Little, Prest.; L. S. Sarver, V.-P.; F. C. Stutts, Secy.-Treas.

Mo., St. Louis.—American Syrup & Preserving Co., Nashville, Tenn., let contract Richard Widdicombe to erect plant; 90x150 ft.; ordinary construction; cost \$10,000; plans by Charles H. Deitering. (Lately noted.)

### CLAYWORKING PLANTS

Ark., Malvern.—Bricks.—Clark Pressed Brick Co. will, it is reported, make extensive improvements.

Ky., Frankfort.—Bricks.—E. P. Denton considering rebuilding brick works lately burned.

La., De Quincy.—Brown Brick Co., Singer, La., will erect plants at De Quincy and Singer. (See La., Singer, and "Machinery Wanted.")

La., Singer.—Bricks.—Brown Brick Co. has incorporated; Dr. J. W. Brown, Prest.; D.

mile track; operate electrically; will erect 50 dwellings and commissary building. (See "Machinery Wanted.")

Ky., Williamsburg.—Southern Mining Co., capital \$30,000, incorporated by E. C. Mahan, A. M. Stewart, P. G. McElroy and others. Mr. Mahan, Secy.-Treas., advises will take over business of Southern Mining Co. of Kentucky.

Tex., Knoxville.—Golden Ash Coal Co., capital \$40,000, incorporated by E. C. Mahan, A. M. Stewart, P. G. McElroy and others.

W. Va., Charleston.—Barton Coal Mining Co., capital stock \$25,000, incorporated by Walter E. Shums, Meyer Kraus and J. Leon Hart, all of Philadelphia, Pa.; W. F. Jacoby, Norristown, Pa., and others.

W. Va., Marlinton.—Pocahontas Coal & Land Co., capital stock \$50,000, incorporated by Hubert Echols, F. R. Hunter, J. W. Price and others.

W. Va., Morgantown.—Poland Coke Co. will build 220 ovens.

W. Va., Weyanoke (not a postoffice).—Weyanoke Coal & Coke Co. (general office, Lowe, W. Va.) will build coal tipple; daily capacity 1500 tons; concrete foundation; let tipple contract to Link Belt Co. of Philadelphia, Chicago, Indianapolis, etc.

### COTTON COMPRESSES AND GINS

Ark., Blissville.—Bliss-Cook-Oak Co. will build gln; three 80-saw gln stands; hydraulic press equipped with automatic transfer; electrical operation.

Ark., Scranton.—Scranton Ginning Co., capital \$5000, incorporated; John H. Raper, Prest.; Mont. Creekmore, V.-P.; Austin Smith, Secy.-Treas.

ing apparatus and car and possibly stokers. A. P. Knowles, Supt.

Mo., Dexter.—Benj. F. Elcholtz, owner local electric-light plant, contemplates installing 125 K. W., 3-phase, 60-cycle, 2300 volt, 600 to 200 R. P. M. generator (beltd), complete switchboard for 75 K. W. and 125 K. W. generator and outgoing lines.

Mo., Kansas City.—Kansas City Terminal Co., John V. Hanna, Ch. Engr., let contract Fogel Construction Co. to build powerhouse to furnish light, power, heat and air to new Union Station and terminals; 93x196 ft.; about 3 stories; steel frame, with reinforced concrete floors and brick walls; cost \$180,000, exclusive of machinery.

Mo., Purcell.—A. M. Baird, Cartersville, Mo., and associates secured franchise to construct electric-light system.

Mo., Russellville.—City considering construction of electric-light plant. Address The Mayor.

Mo., Wellington.—Wellington Light & Power Co., capital \$9000, incorporated by Walter J. C. Westerman, W. H. Breuer and H. H. Neese.

N. C., Mebane.—Piedmont Railway & Electric Co., Burlington, N. C., awarded contract for three 100 K. V. A. transformers, switchboard and accessories. (Previously noted as having franchise.)

N. C., Monroe.—Electric Light Commission contemplating installing equipment, including centrifugal pump, 3-in. suction, 2½-in. discharge, direct connected to induction motor, to carry 60-lb. pressure; W. H. Crow, Supt.

N. C., Morgantown.—Board Public Works contemplates installing second-hand 50 K. W., 60-cycle, 2300 volt, direct connected unit.

Okla., Gotebo.—City placed contract for installing light plant to replace plant previously reported burned. Address The Mayor.

Okla., Hennessey.—Hennessey Electric Light, Power & Ice Co. contemplates installing 30 to 40 H. P. oil engine and generator and equipment for 10-ton ice plant.

Okla., Holdenville.—Holdenville Ice & Electric Co. contemplates purchasing transformers for series street-lighting system.

Okla., Sand Springs.—Power, Light & Water Co. will erect brick building 50x110 ft.; J. H. Hughes, Tulsa, contractor; when completed plant will have 6 gas engines and several dynamos, producing 1500 H. P. (Lately noted.)

S. C., Sumter.—Liberty Holding Co., capital stock \$100,000, incorporated; P. Moses, Jr., Pres.; W. G. Moses, V.-P.; G. L. Ricker, Secy.-Treas.

Tenn., Nashville.—Nashville Railway & Light Co. awarded contract for three 6500-K. W. Curtis turbo-generators with switchboard and accessories.

Tex., Kerens.—Kerens Light & Power Co., capital stock \$15,000, incorporated by S. E. Bergstrom, R. H. Daniel, W. T. Stockton and others.

Tex., Runge.—City voted \$20,000 bonds for electric-light plant and water-works. Address The Mayor. (Lately noted.)

Va., Richmond.—Electric Properties Corporation, maximum capital \$8,000,000, incorporated with Andrew D. Christian, Pres.; H. D. Chalkley, Secy. Mr. Christian wires Manufacturers Record: "Have no statement to make at this time."

W. Va., Charleston.—Charleston-Dunbar Traction Co. awarded contract for 200 K. W. rotary converter, two 100-K. V. A. transformers and switchboard.

W. Va., Charleston.—Charleston Interurban Railroad Co. awarded contract for two G. E. 203, 50 H. P., 4-motor equipments.

W. Va., Mount Hope.—Mt. Hope Power Co., capital stock \$25,000, incorporated by John Faulkner, Ben Ruvitz, T. L. Feazel and others.

### FERTILIZER FACTORIES

Ark., Little Rock.—Arkansas Fertilizer Co.'s plant will include: Fertilizer building 102x400 ft.; steel columns 82 ft. center to center; mill building and rock storage 73x105, former to contain phosphate dens; slow-burning wooden construction; traveling crane (600 ft. per minute) in main fertilizer building; electrically operated; let contract to Elliott Building Co., Hickory, N. C., for concrete foundations and erecting mill building and phosphate dens; to Toledo Bridge & Crane Co., Toledo, O., to erect steel work, fertilizer building and phosphate dens and traveling crane; install 2 complete bagging and manipulating machines; install third later; cost, building and equipment, \$100,000; machinery contracts mainly

let; plans by Peter S. Gilchrist, Charlotte, N. C. (Previously noted.)

### FLOUR, FEED AND MEAL MILLS

Ala., Montgomery.—H. M. Hobbie Grocery Co. awarded contract for installing roller flour mill.

Ark., Vanndale.—Farmers' Union Gin & Mill Co., J. C. Hefley, Pres. (recently noted incorporated), will erect mill, etc. (See "Cotton Compresses and Gins.")

Tenn., Johnson City.—Model Mill Co., J. W. Ring, Pres., will install equipment to increase daily capacity to 1000 bbls. flour, 3000 bu. meal and 100,000 lbs. feed; machinery ordered.

Tenn., Knoxville.—Lewis & Adcock will rebuild burned milling plant; fireproof; brick or concrete; cost \$25,000.

Tenn., Memphis.—Aunt Patsy Feed Co. organized; J. T. Russell, Jr., Pres.; T. A. Divine, V.-P.; P. P. Dammann, Secy.-Treas.; operate poultry and stock feed plant, etc.; install mixing plant; Kaucher & Hodges, engineers in charge. (Lately noted incorporated, \$50,000 capital stock.)

Tenn., Nashville.—Riverside Mills Co., capital \$5000, incorporated by T. I. Ward, C. M. Ward, C. G. Guili, C. A. Polk and others.

Tex., Denison.—Knaur Grain Co. will build flour mill; daily capacity 50 bbls.; machinery ordered.

Tex., Stephenville.—Harding & Arendell awarded contract for installing roller flour mill.

### FOUNDRY AND MACHINE PLANTS

Ala., Ensley.—Pipe.—James Foundry Co. organized; will remodel and operate foundry at 23d St. and Railroad Ave.; contemplates melting 10 tons daily.

D. C., Washington.—Heaters.—Water Jacket Heater Co., capital \$300,000, incorporated by G. I. Comstock and M. F. Shepard, Washington, and M. E. Brown, Wilmington, Del.

Ky., Louisville.—Sadiron.—Rindt Company, Carl Rindt in charge, acquires Art Brass & Plating Works; will manufacture self-heating sadiron, etc.; probably add metal-working machinery; later may build plant. (Lately reported incorporated with \$30,000 capital stock.)

Mo., St. Louis.—Foundry.—Commercial Foundry Co., capital stock \$25,000, incorporated by Frazer P. Gibbs, John P. Becker, Theo. Felsch and others.

Mo., St. Louis.—Water-heating Devices, etc. Jiffy Water Heater Co., capital stock \$15,000, incorporated by Aloys A. Beckmann and Jos. G. Beckmann of St. Louis and Gustave A. Becker of Belleville, Ill.

Tenn., Morristown.—Gas-lighting Machines. Pennington Gas Generator Co. organized by Dr. E. V. Pennington and C. W. Myers. (See "Machinery Wanted.")

Tenn., Nashville.—Furnaces.—Old Sol Hot Air Furnace Co., capital \$10,000, incorporated by A. J. Witt, J. D. Tipler, H. M. Sawrie and H. C. Skinner.

Tex., Fort Worth.—Machinery.—Gamer-Crescent Co., capital stock \$50,000, incorporated by Chas. Gamer, R. Vickery and W. W. Manning.

Va., Charlottesville.—Stoves.—Albemarle Stove & Machine Co., maximum capital \$50,000, incorporated; W. G. Moran, Pres.; Sol Kaufman, V.-P.; Edw. S. Wilder, Secy.-Treas.; purchased completely equipped plant.

### GAS AND OIL ENTERPRISES

Ala., Birmingham.—Iron City Oil & Gas Co., capital stock \$40,000, incorporated; H. T. Stacey, pres.; Lewis Whaley, V.-P.; T. E. Beatty, secy.; P. G. Ault, treas.

Ala., Whistler.—Tristate Oil Co. has incorporated.

Ky., Paris.—Paris Gas & Electric Co. purchased from Central Kentucky Natural Gas Co. municipal franchise to construct natural-gas pipe lines into Paris.

La., Bastrop.—More-Chita Gas, Oil & Pipe Line Co. has incorporated.

La., Jennings.—Calcasieu Petroleum Co. has incorporated.

La., New Orleans.—Interstate Oil, Gas & Development Co. has incorporated.

La., New Orleans.—Toomey Oil & Gas Co., capital \$150,000, incorporated by Leopold Levy, J. E. Vergnes, Paul Rainey and others.

La., Shreveport.—Fort Worth-Louisiana Oil Co. has incorporated.

La., Shreveport.—Pasadena Petroleum Co. acquires interests of J. C. McCue and others and Busch-Everett Co., all of St. Louis;

properties include 40,000 acres, 10,000 being leased, gas and oil lands in Louisiana, Texas, Oklahoma and California; will continue developments for oil and gas production; J. S. Cullinan, Pres. of Texas Company, Houston, Tex., Pres. (Lately noted Storage Co., Whitney-Central Bank Bldg.)

Mo., St. Louis.—Gibbs-Brown Oil & Gasoline Co., capital stock \$30,000, incorporated by J. D. Gibbs, Wm. H. Morgens, R. J. Borwn, F. Kavanaugh Hadley and others.

Okla., Ardmore.—Coline Oil Co., capital \$24,000, incorporated by P. C. Dings and Charles Von Weise, Ardmore; John Ringling, New York.

Okla., El Reno.—Cayuga Oil & Gas Co., capital \$10,000, incorporated by H. J. Sewell, F. N. Tinsman and W. H. Moore.

Okla., Lawton.—Lawton Imperial Oil & Gas Co., capital \$10,000, incorporated by J. H. Mullin, J. Conner, Henry J. Cassin and Guy C. Robertson.

Okla., Muskogee.—Mechanics Oil Co., capital \$5000, incorporated by W. H. Scherffus, J. S. Schmidt and J. C. Kelley.

Okla., Muskogee.—Electa Oil & Gas Co., capital \$25,000, incorporated by E. G. Bothwell, D. C. Bothwell, J. F. Darby and T. L. Gibson.

Okla., Oklahoma City.—Southern Kansas Oil & Gas Co., capital \$25,000, incorporated by M. B. Thornton, J. L. Woodt and Frank Newsome.

Okla., Oklahoma City.—Sapphire Oil Co., capital stock \$5000, incorporated by R. J. F. Williams, Emily M. Williams and T. H. Keller.

Okla., Oklahoma City.—Can't Spill Oil Co., capital \$20,000, incorporated by W. G. Mahaffy, Oklahoma City; J. R. Hayhurst, Tecumseh, Okla., and H. H. P. Parks, Jr., Grandfield, Okla.

Okla., Oklahoma City.—Rex Oil & Refining Co., capital \$50,000, incorporated by I. M. Pieruci, M. Luty and N. Boyce.

Okla., Oklahoma City.—Queen Oil & Gas Co., capital stock \$25,000, incorporated by L. Wilson, G. E. Chaffee, V. D. Bryan and M. E. McVean.

Okla., Oklahoma City.—Oklotoka (not "Oklahoma," as recently stated) Oil & Gas Co., 212 Majestic Bldg., \$100,000 capital stock, incorporated by Ed L. Joyce and others; opens bids about Nov. 1 on drilling equipment. (See "Machinery Wanted.")

Okla., Tulsa.—Konora Oil Co., capital stock \$6000, incorporated by Ray S. Fellow, C. C. Weber and Bruce Hunt.

Okla., Tulsa.—Great Basin Oil & Gas Co., capital stock \$15,000, incorporated by C. J. Freedman, M. C. Hale and W. R. Ritchie.

Okla., Tulsa.—Wabash Oil & Gas Co., capital \$4000, incorporated by E. R. Meighen, J. C. Shaffer and J. P. Morrison.

Okla., Tulsa.—Nile Oil Co., capital stock \$25,000, incorporated by P. A. Wiseman, G. T. Wakefield and R. E. Williamson.

Tenn., Dickson County.—Company incorporated with authorized capital of \$100,000 by V. A. Smith, T. J. Driscoll, C. P. Brant, Patrick Connor, all of Indianapolis, Ind., and others; leased 25,000 to 30,000 acres in Dickson, Cheatham, Williamson, Stewart and Montgomery counties for development.

Tenn., Memphis.—Tanks.—Consolidated Gas & Electric Co. will build gas and oil tanks to cost \$30,000.

Tex., Houston.—Margay Oil Co., capital stock \$50,000, incorporated by T. P. Birmingham and J. I. Taylor of Houston, E. H. Short of Wichita Falls, Tex.

Tex., Klondike.—Klondike Gas, Oil & Development Co., capital stock \$5500, incorporated by J. J. Hunt, S. C. Ratcliff and J. M. Clower.

Tex., Mt. Pleasant.—Mount Pleasant Oil & Gas Co., capital stock \$15,000, incorporated by W. D. Sanders, A. Reid, R. F. Lindsay and others.

Va., Salem.—Gas Plant.—Town Council considering granting franchise build and operate gas plant to J. Elliot Hall (Genl. Mgr. Appalachian Development Co.), Bluefield, W. Va., and E. A. Shubert, Roanoke, Va.

### ICE AND COLD-STORAGE PLANTS

Ala., Birmingham.—Alabama Packing Co. awarded contract for 30-ton vertical refrigerating machine, 11-ton improved freezing and 11-ton distilling systems and storage piping.

Ala., Greensboro.—Greensboro Ice Co. and Greensboro Water & Light Co. consolidated under latter name; capital \$30,000; E. P. Kimbrough, Pres.; R. H. Smith, Secy.-Treas.

Fla., Arcadia.—Southern Utilities Co., Jacksonville, Fla., awarded contract for 20-ton vertical refrigerating machine and 20-ton improved flooded freezing system for Arcadia Ice & Electric Co.

Fla., Ft. Myers.—Southern Utilities Co., Jacksonville, Fla., awarded contract for 20-ton improved freezing system for Fort Myers Ice & Electric Co.

Fla., Miami.—South Atlantic Gulf & Lake Okeechobee Fisheries Corporation awarded contract for 50-ton vertical refrigerating machine, 25-ton improved flooded freezing system, 30-ton distilling and 30-ton boiler systems. (Previously noted organized with \$125,000 capital stock, etc.)

Ga., Atlanta.—Frank E. Black Co. awarded contract for 20-ton vertical refrigerating machine, etc.

Ky., Carlisle.—Carlisle Electric Light & Power Co. will build ice plant; daily capacity 10 tons; drill 4 wells.

Ky., Cerulean.—Rawls, Atwood & Co. will install 5-ton ice plant in spring of 1914; cost about \$4000. (Lately noted under Machinery Wanted.)

Ky., Covington.—Bavarian Brewing Co. having plans prepared by E. F. Glaser, Bell Block, Cincinnati, for cold-storage plant; 2½ stories; brick and reinforced concrete; cost \$45,000.

La., New Orleans.—Federal Fruit & Cold Storage Co., Whitney-Central Bank Bldg., (recently noted incorporated \$300,000 capital stock), will erect cold-storage plant at Macon, Miss. (See Macon, Miss.)

Md., Baltimore.—Kaufman Beef Co. awarded contract for 15-ton refrigerating plant with vertical machine, ½-ton freezing system and storage piping.

Md., Hurlock.—Hurlock Ice Co. incorporated; W. C. Bradley, Pres.; Geo. A. Thompson, Jr., Secy.-Treas.-Mgr.

Md., Salisbury.—Truitt Realty Co., E. W. Truitt, Pres., will let building contract Sept. 15 to erect 40x100-ft. fireproof building; open bids same date on ice machinery, 20 to 30 tons capacity. (See "Machinery Wanted.")

Miss., Clarksdale.—Holland Ice Co. will rebuild burned ice plant; estimated cost \$40,000.

Miss., Macon.—Federal Fruit & Cold Storage Co., Whitney-Central Bank Bldg., New Orleans, La., incorporated, capital stock \$300,000; E. G. Simmons, Pres.; Jas. L. Wright, V.-P.; Philip Simmons, Secy.-Treas.; will erect cold-storage plant with capacity 25,000 to 30,000 barrels apples; desires correspondence with manufacturers and builders in this line. (See "Machinery Wanted.")

Miss., Shubuta.—T. M. Spinks will build 5-ton ice plant. (See "Miscellaneous Factories" and "Machinery Wanted.")

Okla., Hennessey.—Hennessey Electric Light, Power & Ice Co. contemplates installing equipment for 10-ton ice plant. (See "Electric Plants.")

Tenn., Franklin.—Franklin Ice & Cold Storage Co., capital \$20,000, incorporated by Tyler J. Roscoe, J. F. Eggleston, Newton Cannon, Jr., and others; build ice plant; daily capacity 20 tons. (This is company lately stated to be organized by Mr. Roscoe and others.)

Tex., Midway.—Midland Creamery Co., W. F. Sikes, Pres., Buffalo, N. Y., will build ice plant. (See "Miscellaneous Factories.")

Tex., San Antonio.—Citizens' Ice Co. increased capital stock from \$60,000 to \$120,000.

Tex., San Antonio.—Merchants' Ice Co. will build ice plant; daily capacity 100 tons.

Va., Exmore.—Exmore Ice & Cold Storage Co. awarded contract for 50-ton vertical refrigerating machine, 10-ton improved flooded freezing, distilling, boiler systems and storage piping. (Previously noted.)

### LAND DEVELOPMENTS

Ark., Fayetteville.—Johnson Orchard Co. will develop 1000 acres 3 miles north of Murfreesboro, Ark., as peach orchard; cost of improvements \$100 per acre; W. S. Johnson, Pres.; Magnolia, Ark.; J. H. Reynolds, V.-P.; Conway, Ark.; Ernest Walker, Secy.-Treas. (Lately noted incorporated, \$20,000 capital stock.)

Ark., Prescott.—Dallas Town Co., capital stock \$30,000, incorporated; M. L. Moore, Pres.; E. J. Kelly, V.-P.; Nat Martin, Secy.; T. L. Winkler, Treas.

Fla., Dunnellon.—W. S. Blackburn, 257 Central Ave., St. Petersburg, Fla., has option on 20,000 acres south of Ocala and east of Dunnellon at \$200,000; contemplates subdividing for farming. (Recently noted as having purchased land.)



Fla., Fort Myers.—Darrow-Starnes-Bryant Co., W. R. Kaune, Secy., purchased 60 acres and will develop as residential section.

Fla., Miami.—F. J. Ravlin, Chicago, Ill., will develop and colonize 245 acres; divide into 5 and 10-acre tracts, each provided with irrigation plant.

Fla., Parish.—Manatee Valley Land & Development Co., Frank Bennett, Prest., 707 S. & L. Bldg., Des Moines, Ia., will develop 16,000 acres in Manatee county for citrus culture and general farming; colony to be known as Manatee River Park; clear and grade; 8-mile roadway; subdivide into 40-acre tracts, with 30-ft. roads every half mile north and south and every mile east and west; contract for road work awarded to Hiram McElroy, Tampa, Fla. (Recently noted.)

Fla., Tarpon Springs.—Welch Development Co., capital \$100,000, organized by Welch Realty Co. of St. Petersburg, Fla., to develop 25 acres on Whitcomb Bayou; plans to build seawall, fill in low land, construct road on water-front and streets through addition, sidewalks, water and sewer systems, etc.; estimated cost \$40,000.

Fla., St. Petersburg.—City Improvements at Reservoir Park comprise about 3000 ft. concrete wall and 5000 yds. brick street; cost about \$25,000; vote on bonds Oct. 7; J. O. Spencer, City Engr.; C. D. Hammond, Commr. of Public Work. (Lately noted.)

La., New Orleans.—Fidelity Development & Investment Co., capital stock \$100,000, incorporated; Ernest J. Coulon, Prest.; J. Wilfred Gaidry, V.-P.; William H. Heyl, Secy.-Treas.

La., New Orleans.—Massachusetts Colonizing Association, 615 Audubon Bldg., advises will develop 3500 acres; large farms, town-site and public buildings; cost about \$250,000. (Recently noted organized, \$150,000 capital, by R. L. Millette, Jno. T. Jaynes and L. Y. Fontaine to locate colonies, principally from Massachusetts.)

La., New Orleans.—Gulf-Louisiana Land Co. has incorporated.

La., Vidalia.—Tensas River Planting Co., Hatcher, Miss., E. Samuels, Prest., and G. P. Balfour, Secy., will develop 8000 acres in Concordia parish. (Lately noted incorporated, \$500,000 capital.)

Md., Oldtown.—Cumberland Orchard Co. organized with H. L. Daugherty, Prest.; Filmore Cox, V.-P.; C. W. Beamer, Secy.-Treas.; develop 355 acres in orchards; contemplates planting next spring. (Recently noted incorporated under Cumberland, \$15,000 capital.)

N. C., Greensboro.—Southside Development Co., capital \$30,000, incorporated by A. F. Fortune, W. G. Tennille and M. Nora Wooten.

S. C., Belvedere (not a postoffice).—Tourist Investment Co., capital stock \$1,000,000, will be incorporated by Bruce Cleveland (713 14th St. N. W.), J. A. White, Jr., and Howard P. Wright, all of Washington, D. C.; plans to develop 2000 acres (units of 25 acres) as residential suburb.

S. C., Columbia.—Albemarle Park Development Co., capital stock \$7500, incorporated; will develop 25 acres as residential suburb; W. S. Nelson, Prest.; E. N. Joyner, V.-P.; Clarence Richards, Secy.; Harry Cautey, Treas.

Tenn., Knoxville.—University Place Land Co., capital \$100,000, incorporated by E. McCoy, J. Bailey, Ray D. C. Webb and others.

Tenn., Morristown.—Morristown Improvement Co., capital \$15,000, incorporated by W. C. Hale, J. F. Goodson, W. S. Myers and others.

Tex., Fort Worth.—Home Development Co., capital \$15,000, incorporated by Rochester Hadaway, Douglas S. Wolsely and Romulus J. Rheme.

Tex., Mercedes.—Mercedes Development Co. organized with W. Lingenbrink, Prest.; Fred Lamb and D. H. Kennett, V.-Ps.; I. V. Horner, Secy.; general development. (Recently noted incorporated; capital stock \$25,000.)

Tex., New Braunfels.—Comal Springs Nursery will develop 30 acres; nursery stock; cost \$40,000. (Lately noted incorporated, \$100,000 capital, by Otto Locke, Herman Thiele and Herman Locke.)

Tex., San Antonio.—Leona Valley Farms Co. will develop 3200 acres in Dimmit, Frio and Zavalla counties for farming; O. S. De-wees, Prest.; W. F. McCall, Secy.-Treas. (Lately noted incorporated, \$23,000 capital stock.)

Tex., Turnersville.—Turnersville Townsite Co. will develop 200 acres as townsite; Fred Foote, Prest.; T. Boone, Secy.-Treas. (Re-

cently noted incorporated, \$8000 capital stock.)

Va., Richmond.—Southeastern Real Estate Development Co. purchased tract containing about 500 building lots; reported to expend \$20,000 for improvements, including streets, curbing, sidewalks, etc.

### LUMBER MANUFACTURING

Ark., Calico Rock.—Clint Wilson will rebuild burned sawmill.

Ark., Camden.—Southern Piling Co., capital \$10,000, incorporated; H. J. Schraas, Prest.; J. E. Van Cleaves, V.-P.; N. V. Wright, Secy.-Treas.

Ark., Finns.—T. S. Grayson Lumber Co., capital \$50,000, incorporated by T. S. Grayson, Prest.; C. J. Grayson, V.-P.; S. A. Doyle, Secy.-Treas.

Ark., Snyder.—W. C. Renner will build sawmill.

Ark., Warren.—Bradley Lumber Co. will rebuild sawmill lately reported burned at \$65,000 loss; contemplates installing single band and resaw with daily capacity 75,000 ft.

La., West Monroe.—Bell Manufacturing Co., capital \$50,000, organized; O. O. Clark, Prest.; Frank Masling, V.-P.; C. C. Bell, Secy.-Treas.

N. C., Neuse, R. F. D. No. 3.—C. J. Lassiter states will move lumber plant for operation in connection with wheat and corn mills; lately noted under Raleigh. (See "Machinery Wanted.")

Tenn., Tellico Plains.—Tellico Lumber Co. will rebuild saw and planing mills and dry-kiln burned at loss of \$150,000.

Tex., Beaumont.—Queen City Lumber Co., capital stock \$40,000, incorporated; contemplates acquiring Beaumont Column Factory and using as lumber mill, manufacturing both hardwood and pine lumber; D. A. Petty, Prest.; Chas. Sansburg, V.-P.; H. A. McDonald, Secy.

Tex., Keltys.—Frost Lumber Co., Frost, Tex. (recently noted incorporated, capital \$6000), will retail lumber.

Tex., Kyle.—Wallace Bros. Lumber Co. increased capital stock from \$10,000 to \$25,000.

### METAL-WORKING PLANTS

Ala., Mobile.—Sheet Metal, etc.—Mobile Steel Co., Eslava and Water Sts., leased water-front buildings; ordered \$25,000 machinery equipment, including stamping presses, galvanizing plant, electrical drive installation, etc.; manufacture pressed steel, galvanized iron and sheet-metal products; Prest., Walter E. Voigt, New York; V.-P., A. G. Kroncke, Madison, Wis.; Treas., W. O. Evans, Mobile. (Lately noted incorporated with \$25,000 capital stock, etc.)

### MINING

Ala., Birmingham.—Sand.—Standard Sand Co., capital stock \$50,000, incorporated; J. R. Maloney, Prest.; W. F. Neal, V.-P.; W. L. Sleaurate, Jr., Secy.-Treas.

La., Minden.—Gravel.—Minden Gravel Co. has incorporated.

Mo., Joplin.—Lead and Zinc.—Underwriters' Land Co. purchased Falls City Lead & Zinc Co.'s mining property; plans to remodel 40-ton concentrating plant, install 10 sludge tables, etc.

Mo., Joplin.—Lead and Zinc.—William Higgins and others, Louisville, Ky., will erect concentrating plant on St. Louis-Joplin lease in Chitwood and build another mill on Gregg lease in Gordon Hollow.

Mo., Joplin.—Lead and Zinc.—Wentworth Land & Mining Co. purchased Martha Ball mine and lease; will further develop and probably enlarge capacity of present 200-ton mill.

S. C., Abbeville.—Gold.—Neel Gold Mining Co., capital stock \$20,000, organized by W. W. Bradley and others.

Tenn., Erwin.—Feldspar.—Henry A. Kaufman, Bedford, N. Y., and associates will build mill.

Tex., El Paso.—Granite.—Southern Compo Granite Co., capital \$5000, incorporated by Otis E. Carter, J. S. Turner, J. R. McLeod and others.

### MISCELLANEOUS CONSTRUCTION

Ala., Fairhope.—Pier.—Magnolia Beach Pier Co., capital \$5000, incorporated with Geo. S. Goodbrad, Prest.; W. J. Dehl, V.-P.; Stella Black, Secy.; W. J. Carlisle, Treas., all of Mobile, Ala.; will construct pier. (Lately noted.)

Ark., Chicot County.—Levee.—Board of Commissioners, Tensas Basin Levee District, T. B. Gilbert, Prest., Raysville, La., will con-

struct following levee work in Chicot county: Gaines Landing levee, enlargement, 30,000 cu. yds.; bids received at office Board of State Engineers, 213 New Orleans Court Bldg., New Orleans, until Sept. 4. (See "Machinery Wanted.")

Ark., Helena.—Levee.—Helena Improvement District, Maj. C. H. Purvis, Ch. Engr., plans \$400,000 bond issue to reconstruct and enlarge levees; reconstruct 1000 ft. of levee (which settled) to width and depth of 75 and 25 ft., respectively.

Fla., Miami.—Canal.—State having plans prepared for short canal to extend from about 1 mile above lock in Miami Canal to Biscayne Bay, near Little River, to divert salt from Miami River; F. C. Elliott, Acting State Drainage Engr.

Ga., Augusta.—Concrete Walls.—River and Canal Committee let contract W. F. Bowe to build two reinforced concrete walls; one 280 ft. long and 20 ft. high; other 100 ft. long and 10 ft. high; cost \$450 and \$590, respectively.

Ga., Augusta.—Dikes.—Government will construct shore-protection dikes in Savannah River; bids received at office U. S. Engr. office, Savannah, Ga., until Sept. 30; Dan C. Kingman, Col. Engrs. (See "Machinery Wanted.")

La., Alexandria.—Dikes.—Board of Commissioners, Red River Atchafalaya and Bayou Boeuf Levee District, E. G. Richard, Prest., will construct following protection work at and near lower end levee line, St. Landry parish, Atchafalaya River, right bank: Super dikes, timber and earth work, former about 200,000 ft., B. M., and latter 1200 cu. yds.; bids received until Sept. 4 at office Board of State Engineers, 213 New Orleans Court Bldg., New Orleans. (See "Machinery Wanted.")

Ga., Savannah.—Docks.—City will purchase site 204 ft. on river and depth 214 ft.; proposes to build concrete docks with sheds, estimated to cost \$30,000; E. R. Conant will submit report.

La., Baton Rouge.—Levee.—State, Luther E. Hall, Governor, will construct following levee work: St. Joseph Church levee, St. James parish, Mississippi River, left bank, 90,000 cu. yds.; Ben Ruth Lake levee, Avoyelles parish, Red River, right bank, 50,000 cu. yds.; School House South levee, Avoyelles parish, Red River, left bank, 40,000 cu. yds.; Iron Mountain Crossing to Hynsons levee, Rapides parish, Bayou Rapides, south bank, 20,000 cu. yds.; bids received until Sept. 4 at office Board State Engrs., 213 New Orleans Court Bldg., New Orleans. (See "Machinery Wanted.")

La., New Orleans.—Levee.—Capt. C. O. Sherill, U. S. Engrs. Office, 213 New Orleans Court Bldg., let contracts aggregating \$92,559.52 for 291,800 cu. yds. levees in Atchafalaya, Lafourche, Barataria and Lake Borgne districts as follows: Lower Coast Construction Co., Pointe-a-la-Hache, La., construction in Barataria and Lake Borgne districts; Geo. W. Garig Construction Co., Baton Rouge, La., Atchafalaya district; Lambert Bros., St. Rose, La., Lafourche district.

La., Southport.—Levee.—Pontchartrain Levee Board, Hunter C. Leake, Prest., will construct following levee work on Mississippi River, left bank: Bourbon Levee, St. James parish, 120,000 cu. yds.; Protection Levee to Southport Levee, Jefferson parish, 90,000 cu. yds.; bids received until Sept. 4 at office Board of State Engineers, 213 New Orleans Court Bldg., New Orleans.

La., St. Benedict.—Silo.—St. Joseph's Abbey will build large silo.

Mo., St. Louis.—Dikes.—Board Public Improvements considering construction of dikes to reclaim 25 acres river front property; estimated cost \$90,000.

Tex., Crystal City.—Dam.—Alexander Roynton will construct previously-noted dam. (See "Water-power Developments.")

Tex., Dallas.—Dam.—Koon Kreek Klub will build dam to furnish additional 1500 acres water for duck shooting; H. E. Elrod, Ch. Engr., invites bids until Sept. 23.

Tex., Galveston.—Seawall.—Galveston County Commissioners rescinded action calling for election on Sept. 26 to vote on \$300,000 bonds to extend seawall. (Lately noted.)

Tex., Freeport.—Dredging.—Government will dredge old turning basin at wharf of Velasco Wharf & Warehouse Co. to original dimensions, 400 ft. wide, 900 ft. long and 18 ft. deep, and dredge old channel extending between jetties from this turning basin to 18 ft. depth in Gulf; channel to be 1500 ft. wide and 18 ft. deep; about 200,000 yds. to be removed; Col. C. S. Riche, U. S. Engr., U. S. Engr.'s Office, Trust Co. Bldg., Galveston, invites bids until Sept. 9; entire

channel may be excavated by hydraulic pump blue dredge, or contractor may excavate outer end by seagoing dredge and inside with spud dredge; bids invited on work as whole and by sections, different unit prices being used for hopper dredge and hydraulic pipe line being worked.

Tex., Texas City.—Dredging, etc.—Government will dredge in Texas City channel and construct pile dike along channel; receive bids until Oct. 3 at U. S. Engr. Office, Galveston; C. S. Riche, Lieut.-Col. Engrs. (See "Machinery Wanted.")

### MISCELLANEOUS ENTERPRISES

Ark., Camden.—Laundry.—C. E. Kay will build laundry; purchased machinery.

Ark., Little Rock.—Contracting.—Johnson Construction Co., 201½ W. 2d St., P. B. Hill, Prest., will conduct contracting of levee, road, drainage, railroad, foundations, bridges, etc. (Recently noted incorporated, capital \$25,000.)

D. C., Washington.—Electrical Machinery.—Washington Suburban Electric Co., capital \$1000, incorporated by Herl A. Petersen (4127 7th St. N. W.), J. H. Petersen and Walter Trouland.

Fla., Ocala.—Laundry.—Geo. Rentz and W. H. Dodson will build steam laundry; machinery ordered.

Fla., West Palm Beach.—Publishing.—Palms Publishing Co., capital stock \$10,000, incorporated by D. H. Conkling and W. L. Thornadyke, West Palm Beach, and Joe L. Earmann, Jacksonville.

Ga., Savannah.—Incinerator.—Destructor Company of New York let contract to Eldred Simkins to erect building for incinerator; contract to install plant lately reported awarded Destructor Company.

La., New Orleans.—Construction.—Shell Beach Construction Co. has incorporated.

La., Slidell.—Grain Elevator.—Slidell Grocery & Grain Co. will erect grain elevator; ordinary construction; cost \$8000; daily capacity 15,000 bus. grain. (Lately noted as Covington Grocery & Grain Co.)

Miss., Vicksburg.—Levee Contracting.—S. R. Hughes Construction Co., 607 First National Bank Bldg., organized with S. R. Hughes, Prest.; W. J. Shackelford, Mgr.; levee contractors. (Recently noted incorporated, capital \$10,000.)

N. C., Asheville.—Incinerator.—City contemplates building garbage crematory; considering proposition of Geo. J. Meade, Chief Engr. Dixon Incinerator Co., Toledo, O., to install plant.

N. C., Reidsville.—Tobacco Redrying.—S. C. Penn purchased A. H. Motley Co. factory building; contemplates installing tobacco redrying equipment.

N. C., Charlotte.—Incinerator.—Aldermen rejected bids for building garbage incinerator; probably made new arrangements; A. H. Wearn, City Clerk. (Call for bids lately noted.)

S. C., Charleston.—Publishing.—Southern Drainage & Good Roads Magazine Co., capital stock \$2000, incorporated by John McCrady and Paul M. Macmillan.

Tenn., Memphis.—Electrical Supplies.—Southern Electric Co., capital stock \$500, incorporated by John B. Vesey, G. S. Scruggs, C. E. Gheeks and others.

Tenn., Nashville.—Construction.—Rock City Construction Co., capital stock \$10,000, incorporated; G. B. Howard, Prest.; J. W. N. Lee, Secy.-Treas.; H. S. Sumner, Supt.; offices on Eighth Ave. N., near Broadway.

Tex., Corpus Christi.—Garbage Incinerator. Roy Miller, Mayor, states H. A. Stevens, City Engr., will prepare plans and specifications for garbage incinerator, cost within \$15,000. (\$20,000 bond issue recently noted voted.)

Tex., San Antonio.—Laundry.—New Process Laundry Co. increased capital stock from \$10,000 to \$20,000.

Va., Richmond.—Cleaning, Pressing, etc.—Granger Cleaning Co. incorporated; A. P. Granger, Prest.; E. C. Granger, Secy.-Treas.

### MISCELLANEOUS FACTORIES

Ala., Mobile.—Bottling.—Pep-to-Lac Co., Birmingham, Ala., contemplates building bottling plant to cost \$25,000 to \$50,000.

Ark., Olyphant.—Brooms.—E. E. Bricker of Arthur, Ill., will establish broom factory.

Fla., Jacksonville.—Brooms.—Spanish Rush Broom Co., capital stock \$50,000, has been incorporated.

Fla., Palatka.—Blasting Powder.—Florida Utahite Safety Powder Co., A. T. Milteer,

Prest., will establish plant to have daily capacity 10 tons. (Lately noted.)

Fla., Pensacola—Creamery.—A. T. Barkdull interested in establishing creamery. (See "Canning and Packing Plants.")

Ga., Dublin—Dust-down.—J. H. Witherington contemplates establishing plant to manufacture floor dust-down. (See "Machinery Wanted.")

Ky., Louisville—Soap.—Magic Kellar Soap Works, 27-45 Stoecker Ave., capital stock \$2000, incorporated; Geo. G. Montz, Prest.; W. S. Montz, V.P.; C. H. Stoecker, 2d V.P.; Edw. C. Stoecker, Secy.; manufactures laundry soap; machinery installed.

Ky., Louisville—Chemicals.—Davis Chemical Co., capital stock \$3000, incorporated by Henry H. Davis, Edwin M. Ritter, Lewis W. Hennings and others.

Ky., Louisville—Coffee.—Louisville Coffee Co., capital \$30,000, incorporated by C. W. White, J. M. Howey and N. Hope.

Ky., Paducah—Oil Burners.—Louis Boatwright plans organizing company to manufacture oil burner he invented.

La., New Orleans—Cane Products.—Cane Products Co. has incorporated.

Miss., Meridian—V. L. Crawford proposes to establish manufacturing plant.

Miss., Shubuta—Ice Cream.—T. M. Spinks advises will build ice-cream factory and 5-ton ice plant. (See "Machinery Wanted.")

Miss., Vicksburg—Toothbrushes.—Dye Formo-Aseptic Co. organized with Frank E. Hale, Prest.; Ernest C. Dye and Wm. H. Penn, V.P.; Chas. J. Edwards, Secy.; H. B. Wilson, Treas.; will purchase (or have made to order) brushes of special design; have sterilizer parts made and then assemble; recently noted incorporated, \$250,000 capital. (See "Machinery Wanted.")

Mo., Brandsville—Cheese.—W. R. Haight of Haight Orchard Development Co. will establish cheese factory.

Mo., Jefferson City—Brewery.—Mutual Brewing Co. increased capital stock from \$700,000 to \$1,000,000; will install machinery to increase capacity.

Mo., Joplin—Shoes.—Hamilton-Brown Shoe Co., St. Louis, Mo., contemplates establishing plant.

Mo., Joplin—Brooms.—J. W. Wren Broom Co. contemplates enlarging plant; erect 1-story brick bldg., 46x120 ft.; weekly capacity 200 brooms; cost \$5000.

Mo., Kansas City—Silos.—Chas. J. Perkins, Denmore Hotel, will organize company to establish silo factories.

Mo., Kansas City—Mops.—International Mop Manufacturing Co., capital \$50,000, incorporated; C. S. Van May, Prest. and Treas.; H. M. Sturgis, V.P.; F. D. Glove, Secy.; rented building; will manufacture; capacity 12 mops per minute; machinery installed.

Mo., Kansas City—Creamery.—Hickman Bros. Butter Co., capital stock \$10,000, incorporated by E. P. Hickman, A. H. Dolman and A. E. Hickman.

Mo., Springfield—Cheese.—J. L. Kraft & Bros., Chicago, plan erecting chain of cheese factories in Missouri Ozark Mountain regions; each to cost \$5000.

Mo., St. Louis—Steel Tires.—Pneumatic Steel Tire Corporation, capital \$150,000, chartered by Fred E. Olcott, John M. Hartz, Alex. Schwartz and others.

Mo., St. Louis—Nunn Base Leaf Tobacco Co., capital stock \$100,000, incorporated by A. R. Nunn, F. H. Buse, W. A. Kreft and J. J. Zulauf.

Mo., St. Louis—Bakers' Supplies.—Schwartz-Meuser Bakers & Confectioners' Supply Co., capital stock \$18,000, incorporated by Edward Schwartz, Wm. T. Meuser, Frank J. Oeschner and others.

N. C., Rural Hall—Closet Seats.—Patterson-Kiser Seat Co., Greensboro, N. C., organized; G. W. Patterson, Prest.; Claude Kiser, Secy.-Treas.; practically completed closet seat plant; daily capacity 500; machinery purchased. (Recently noted incorporated, \$200,000 capital stock.)

Okla., Hugo—Cigars.—Ables Cigar Manufacturing Co., capital \$10,000, incorporated by J. H. Dawley, Earl Shaffer and W. E. Schooler.

S. C., Greer—Mattresses, etc.—T. J. Troublefield contemplates establishment of factory to manufacture cotton and excelsior mattresses, comforts, etc. (See "Machinery Wanted.")

S. C., Sumter—Plastic Materials.—Plastic Materials Co., capital \$20,000, incorporated; E. N. Rhame, Jr., Prest.-Treas.; E. M. Hagler, V.P.-Secy.

Tenn., Buffalo—Buffalo Manufacturing Co., capital \$3400, incorporated by C. M. Brown, G. A. Sladen, T. J. Slayden and others.

Tenn., Chattanooga—Films.—Famous Players' Film Service, capital \$25,000, incorporated by Elmer D. Rule, Lawrence H. Smith, John A. Rule and others.

Tex., Galveston—Bakery.—Peter Gengler & Co., 2665-2667 Market St., will erect bakery; 1 story; brick; 2 brick ovens; enlarge main building and build runways across alley to connect 2 structures; cost \$10,000.

Tex., Houston—Cigars.—Texas Cigar Co., capital stock \$35,000, incorporated by H. G. Williams, William J. Cox and J. A. Setter, all of San Antonio Tex.

Tex., Midway—Creamery, etc.—Midland Creamery Co., W. F. Sikes, Prest., Buffalo, N. Y., purchased 540 acres as site for creamery; will build ice plant, ice-cream factory, 2 silos of 200 tons capacity and 10 barns, each with capacity of 100 cows; also purchased 1600 acres for grazing.

Va., Fredericksburg—Shoes.—Fredericksburg Shoe Co., A. W. Embrey, Prest., let contract Frank P. Stearns to erect \$6000 mill-construction building; machinery cost not yet known. (Lately noted.)

Va., Money Point (not a postoffice)—Ammoniates, etc.—Omega Corporation, maximum capital \$75,000, chartered; E. P. Young, Sr., Prest., Wilmington, Del.; B. F. Goetz, Secy., Norfolk, Va.; E. P. Young, Jr., Treas., Wilmington, Del.

Va., Newport News—Brewery.—National Brewing Co. will erect building; let contract C. T. Holtzclaw for carpentry and G. W. Whitley for brick and concrete work.

Va., Norfolk—Flavoring Extracts, etc.—Virginia Laboratory Incorporated; W. I. Gilkeson, Prest.; Adolf M. Leue, V.P.; E. W. White, Secy.-Treas.; capital \$10,000.

Va., Richmond—Automobile Accessories.—Auto Cover & Supply Co., maximum capital \$15,000, incorporated; A. Blackburn, Prest.; A. W. Evans, Secy.; H. B. Williamson, Gen. Mgr.

Va., Roanoke—Tobacco.—Hatcher-Perry Co. Incorporated; James W. Hatcher, Prest.-Treas.; C. R. Williams, V.P.; J. N. Perry, Secy.; capital \$15,000.

W. Va., Charleston—Glass.—Olney Flint Glass Co., Olney, Ill., contemplates building plant at cost \$75,000 to \$100,000.

W. Va., Charleston—Enameling.—Fletcher Bros. Stamping & Enameling Works, Anderson, Ind., contemplates building plant at cost \$75,000 to \$100,000.

W. Va., St. Albans—Glass.—St. Albans Glass Co. organized with W. E. Mohler, Prest. and Mgr.; Myron G. Campbell, Secy.-Treas.; will open proposals Oct. 1 to erect 50x100-ft. mill construction building costing \$5000. Address building proposals to W. C. Stonaker. (Lately noted incorporated, \$50,000 capital.)

## MOTORS AND GARAGES

D. C., Washington—Automobiles.—Prober-Haynes Motor Co., capital stock \$10,000, incorporated by T. C. Prober, William D. Arlson and others; deal in motor vehicles; 1220 Wisconsin Ave.

Md., Baltimore—Automobiles.—Reus Bros. & Co. (Burkhard J. Reus and others), 1900 W. Baltimore St., purchased site Mount Royal Ave. near Oliver St.; will erect sales-room for motor specialties, automobile tires and accessories.

Md., Cumberland—Motor Trucks.—Joseph W. Creman, Pittsburgh, Pa., and associates considering establishing motor-truck factory.

Mo., St. Louis—Automobiles.—Anselm-Ganahl Motor Car Co., capital stock \$5000, incorporated by Roy W. Anselm, Leo F. Ganahl and Richard J. Ganahl.

Mo., St. Louis—Willys-Overland Automobile Co. of Ohio will erect building; 3 stories; fireproof; site 50x155 ft.; cost \$50,000; plans by A. B. Groves.

Mo., St. Louis—Automobiles.—Halsey Automobile Co. will erect proposed sales building; 3 stories; fireproof; reinforced concrete; 100x150 ft.; 2 electric elevators, passenger and freight; latter capacity 15,000 lbs.; top floor for machine shop; electric pumps for gasoline and oil; cost \$100,000; J. L. Wees to supervise construction.

Mo., St. Louis—Motor Trucks.—Palmer-Meyer Motor Car Co., 5027 McKissack Ave., organized with C. W. Palmer, Prest. and Mgr.; F. A. Meier, V.P.; F. C. Meyer, Secy.-Treas.; manufactures motor trucks; equipment supplied. (Recently noted incorporated, capital \$100,000.)

N. C., Charlotte—Automobiles.—Haynes Motor Sales Co., capital \$25,000, incorporated by W. J. Crowell, J. A. Rose and C. H. Garman.

N. C., Wadesboro—Garage.—Blalock Hardware Co. leased 70-ft.-front lot, S. Green St., and will erect garage.

S. C., Charleston—Automobiles.—Charleston Auto Rental Co. Incorporated; Edmund Jahnz, Prest.; Hugo Jahnz, Secy.-Treas.

Tenn., Nashville—Garage.—Chester Motor Car Co. will build garage; C. A. Ferguson, Archt.

Tex., Floresville—Garage.—F. W. Moore will build garage; corrugated iron; 40x70 ft.

Tex., Fort Worth—Automobiles.—Hondo Auto Sales Co., capital \$3000, incorporated by Claude W. Gilliam, Charles E. Roberts and O. H. Miller.

Tex., Hondo—Pottery.—Fort Worth Pottery Co., capital \$20,000, incorporated by John Scharbauer, B. P. Brummett and C. C. Willingham.

Tex., Yonkum—Automobiles.—Universal Motor Car & Supply Co., capital \$3000, incorporated by Otto Wagener, F. F. Klohs and H. S. Eekam.

W. Va., Elm Grove—Automobiles.—Elm Grove Motor Sales Co. will incorporate with \$10,000 capital stock; enlarge repair shop.

Va., Norfolk—Garage.—City will build garage; probably let contract to C. N. Moody.

Va., Richmond—Automobiles.—Henrico Car Co., maximum capital \$50,000, incorporated; Arthur C. Nelsen, Prest.; J. A. Reams, V.P.; Geo. Preston, Secy.

## RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Tex., Teague.—Trinity & Brazos Valley Railway, J. W. Robins, Gen. Mgr., Houston, will rebuild shops lately burned at estimated loss of \$225,000.

## ROAD AND STREET WORK

Ala., Gadsden.—R. M. Hudson (recently noted receiving tentative contract) advises proposed paving will not be done at present.

D. C., Washington.—Board of Commissioners, 509 District Bldg., will grade certain streets; 23,000 cu. yds.; bids received until Sept. 8. (See "Machinery Wanted.")

Ark., Bentonville.—Benton County Commissioners will expend \$23,000 for road improvements.

Ark., Pine Bluff.—Board of Public Affairs, S. Bloom, Chmn., will construct concrete sidewalks on Tennessee and Alabama Sts.; receive bids until Sept. 15; W. A. Lee, clerk. (See "Machinery Wanted.")

Ark., Texarkana.—Board of Trade plans to construct road from Texarkana to Ashdown.

Fla., Daytona.—S. H. Gove interested in plan to construct concrete highway; Daytona to Miami via West Palm Beach, Fort Lauderdale, etc.

Fla., Marianna.—Jackson County Commissioners issued \$100,000 bonds for road construction.

Fla., Punta Gorda.—City votes Oct. 7 on \$42,818 bonds to pave streets with grouted brick laid on edge, with concrete curb and gutter; in business districts paving will be from curb to curb, and on other streets 20 ft. wide with parkway on each side; Hiram McElroy, Engr., Box 712, Tampa. (Lately noted.)

Fla., Sanford.—City voted \$50,000 bonds for street and sewer improvements. Address The Mayor.

Fla., St. Petersburg.—City, W. F. Divine, Clerk, asks bids until Oct. 6 to grade, curb and pave on 6th and 7th Aves. and 11th St.; concrete curb 6x15 in.; vitrified brick paving laid flat. (See "Machinery Wanted.")

Ga., Austell.—City voted \$5000 bonds to improve streets. Address The Mayor. (Lately noted.)

Ky., Louisville.—City will pave sections of Barrett, Logan, Sixth, Madison and Chestnut Sts. and Broadway with asphalt; estimated cost, \$63,000; Board Public Works received bids Sept. 3; also pave sections of Shelby, 15th and Walnut Sts. with brick; estimated cost, \$25,500; Board Public Works received bids Sept. 4.

Ky., Louisville.—Board Public Works let contract Sept. 9 for street paving to cost about \$30,000; streets include portions of Clay and Transit Sts., bituminous macadam or bituminous concrete on old base; also Madison, from Clay to Shelby Sts., with vitrified block to cost \$4600.

La., Natchitoches.—City, Geo. W. Kile, Mayor, will pave or gravel about 40,000 sq. yds. on 2d, Toulaine, Amulet, Ragan, 3d, Bosser and Sibley Sts.; bids received until Sept. 9. (See "Machinery Wanted.")

La., New Orleans.—Highway Department, Board of State Engineers, 104 New Orleans Court Bldg., will construct main public highway, Mansfield to Benson, 12 miles; W. E. Atkinson, Highway Engr.; Frank M.

Kerr, Chf. State Engr.; receive bids until Sept. 8. (See "Machinery Wanted.")

La., New Orleans.—City will let contract Southern Bitulithic Co. to repave Esplanade Ave. from N. Rampart to N. Claiborne Ave., and Bancroft & Ross to lay subsurface drains; city contemplates paving N. Rampart St., Apricot St. from Carrollton Ave. to Joliet St. with asphalt, and Decatur St. from Iberville to Conti St.; W. J. Hardee, City Engr.

La., Plaquemine.—Road District No. 2, Iberville parish, votes Sept. 22 on \$46,000 bonds to construct roads. Address Police Jury.

Md., Baltimore.—City let Contract No. 124 to Baltimore Asphalt Block & Tile Co., 231 Courtland St., at \$32,697.50; 13,900 sq. yds. bituminous concrete paving on portions of Thomas, Warwick, Arunah and Wheeler Aves. (Call for bids lately noted.)

Md., Baltimore.—City let Contract No. 69, George Long Contracting Co., 3311 1st Ave. E., at \$7211; 2150 sq. yds. wood-block paving on Water St. from Gay to South St.; Contract No. 70, Southern Paving & Construction Co., Chattanooga, Tenn., at \$132,886; portions of Chase, Monument, Fayette, Gough, Eden and Bond Sts., Contract No. 70, with bituminous concrete (13,250 sq. yds.), sheet asphalt (33,500 sq. yds.), vitrified block (8250 sq. yds.), granite block (4300 sq. yds.). (Call for bids lately noted.)

Md., Baltimore.—Board of Awards will construct Road No. 3, Gunpowder Supply Contract No. 24, about 1.7 miles macadam or concrete, on property at Loch Raven. Approximate quantities: Clearing and grubbing, 1 acre; stripping, 2000 sq. yds.; excavation, 7100 cu. yds.; rubble masonry, 30 cu. yds.; cobble paving, 60 sq. yds.; road drains, 5 sq. yds.; 207 lin. ft. 18x18 in., 131 lin. ft. 24x24 in., 39 lin. ft. 48x36 in., 31 lin. ft. 36x24 in., 78 lin. ft. 48x18 in. reinforced concrete culvert; 77 cu. yds. concrete end walls; 190 lin. ft. underdrains; 23 ft. span reinforced concrete bridge; 6888 sq. yds. (each) 8 in. and 6 in. water-bound macadam or 13,776 sq. yds. 6 in. concrete pavement; bids received until Sept. 17; Ezra B. Whitman, Water Engr. (See "Machinery Wanted.")

Miss., Raleigh.—District No. 1, Smith county, will continue construction of sand-clay roads; sell \$30,000 bonds; B. S. Snowden, highway engineer, Snowden, N. C.

Mo., Booneville.—City voted \$25,000 bonds for street improvements. Address The Mayor.

Md., Rockville.—Montgomery county will build section of Post Rd. from Rockville line 28.44 feet to Potomac; water-bound macadam; bids received until Sept. 16; Jos. T. White, Prest. County Comms. (See "Machinery Wanted.")

Mo., Kansas City.—Jackson County Commissioners, Independence, Mo., let contract Mulholland Construction Co. at \$7939 to rebuild old Raytown rock road from 27th St. to Raytown, 3 miles.

N. C., Columbus.—Polk County Commissioners let following contracts to construct about 50 miles of road, all of sand clay, about 20 ft. wide; C. D. Geer, Rutherfordton, N. C., road from Tryon to Saluda via Picolet Valley; Constant & Edwards, Tryon to Mill Springs; Simmons & Walker, Rutherfordton, N. C., Mill Springs to Rutherfordton; Walker & Edwards, to Chimney Rock; Commissioners will undertake work in Green Creek township under superintendent; \$100,000 bond issue voted. (Lately noted.)

N. C., Raleigh.—City will pave 30,000 to 40,000 sq. yds. asphalt macadam or asphalt concrete; bids received until Sept. 8; James I. Johnson, Mayor. (See "Machinery Wanted.")

N. C., Winston-Salem.—City will pave Glade St. east; P. H. Hanes will pave street west across Peter's Creek bottom to West Highlands (suburb).

Tenn., Chattanooga.—City let contract Nell Construction Co. at \$12,446 to pave portions of 10th and A Sts. with asphalt macadam, including vitrified brick gutters, granite curb and cement sidewalks; A. N. Sloan, Commr. Department Streets and Sewers. (Call for bids lately noted.)

Tenn., Johnson City.—City will construct paving with brick, asphalt, bitulithic, wood block, granitoid, asphaltic concrete, concrete or tarvia for Improvement Districts Nos. 19, 25, 26, 27, 28, 29 and 30 according to plans and specifications in office of City Engr.; approximate quantities: 99 yds. railway paving; 17,052 yds. paving, including grading; 7634 lin. ft. curb and gutter; 3519 lin. ft. 6-in. sewer connections, 3075 lin. ft. 8-in. vitrified sewer, 205 lin. ft. 12-in. sewer, 6 manholes and 1 catch-basin; bids received



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until Sept. 18 (extended date); P. F. McDonald, City Commissioner; recently noted. (See "Machinery Wanted.")

Tenn., Memphis.—Shelby County Commissioners, T. B. King, Chrm., contemplate constructing road to connect with highway built through DeSota county, Miss., to Tennessee State line; cost \$15,000 to \$25,000.

Tex., Beeville.—Precinct No. 1, Bee county, will construct roads; \$25,000 bonds. Address County Commrs.

Tex., Bishop.—City voted \$14,000 bonds to build road to connect with county roads and to improve streets within city limits. Address The Mayor. (Lately noted.)

Tex., Bullard.—Bullard District of Smith county voted \$30,000 bonds to construct roads. Address District Commrs.

Tex., Hempstead.—Road District No. 5 of Waller county votes Sept. 25 on \$15,000 bonds for road construction.

Tex., Laredo.—Webb county let contract to R. M. Johnson at \$22,776 to construct road from city limits to county line.

Tex., Port Lavaca.—District No. 3, Calhoun county, votes Sept. 20 on \$5000 road bonds. Address County Commissioners.

Tex., Waco.—City let contract Texas Bitulithic Co., Dallas, at \$34,845 to pave 18th St.; 15,000 sq. yds. paving, 6000 lin. ft. gutter, 1500 lin. ft. curb; G. E. Byers, City Engr.

Va., Highland Park, P. O. Richmond.—Committee on Streets and Roads, F. B. Evenson, chairman, will gravel roadbed; about 45,000 sq. yds.; receives bids until Sept. 1; John M. Lewis, supt., advises bids will be tabulated and opened at Council meeting Oct. 1. (See "Machinery Wanted.")

Va., Wise.—Wise County Commissioners let contract to construct road from Norton to Coeburn along Guestrs River; 10 miles.

W. Va., Elm Grove.—Town will pave sections of Cruger St. and National Rd.; Town Recorder receives bids until Sept. 4.

W. Va., Parkersburg.—City let contract C. Kennedy & Son at \$33,750 and Otto Lehman at \$33,460 to pave streets with brick; rejected bids for concrete paving and will receive new bids until Sept. 15. (Call for bids lately noted.)

W. Va., Wheeling.—City let contract L. G. Haddock & Son at \$2966 to pave South St.

W. Va., Wheeling.—Ohio County Commrs. will pave with brick certain portions of following county roads: National road (2 locations), Greggsville, Clinton and Potomac road, Fairmont pike (2 locations), Wheeling and Elm Grove road; bids received until Sept. 6; Geo. W. Oldham, Clk. (See "Machinery Wanted.")

**SEWER CONSTRUCTION**

Fla., Punta Gorda.—City votes Oct. 7 on \$22,132 bonds for sanitary sewers and \$4000 for storm sewers; septic tank system; will include about 2 miles 12-in. to 6-in. sewers; Hiram McElroy, Engr., Box 712, Tampa. (Lately noted.)

Fla., Sanford.—City voted \$50,000 bonds for sewer and street improvements. Address The Mayor.

Ga., Austell.—City voted \$8000 bonds to construct sewers. Address The Mayor. (Lately noted.)

Ky., Louisville.—Board Public Works let contract Edwin F. Larson at \$11,252 to construct Raseyeyr Ave. sewer. (Lately noted.)

Ky., Murray.—Murray Sewerage Co. organized to construct sewer system; Geo. W. Overby, Prest.; H. B. Gilbert, Secy.-Treas.

La., Hammond.—City considering \$120,000 bonds to construct sewer system. T. R. Thames, Commr. Finance.

Miss., Natchez.—City will extend sewer system in South Union and South Commerce Sts.; also install electric pumping station to operate same; total cost \$2600; McCorkle & Baylis, 704 Farley Bldg., Birmingham, Ala., engineers.

N. C., Charlotte.—City let contract Standell & Bros. at \$4540 to construct sewers in Belmont, Dilsworth and Piedmont additions.

N. C., Weldon.—City let contract to construct sewer system; 2000 ft. sewer, 6 to 12 ins.; W. C. Riddick, Consult. Engr., West Raleigh, N. C. (See "Water-works.")

Okla., Coalgate.—City receives bids until Sept. 10 on sewer construction recently described; 8961 lin. ft. 8, 15 and 18-in. pipe; 5558 cu. yds. earth and 338 cu. yds. rock excavation; let contract Sept. 10; Asa Montgomery, City Clerk. (See "Machinery Wanted.")

Okla., Tulsa.—City will construct sanitary sewer system and sub-main sewer in district No. 82; bids received until Sept. 8;

T. C. Hughes, City Engr. (See "Machinery Wanted.")

Tenn., Johnson City.—City will construct paving and sewers in Improvement Districts Nos. 19, 25, 26, 27, 28, 29 and 30; will require 3510 lin. ft. 6-in. sewer connections, 3075 lin. ft. 8-in. vitrified sewer, 295 lin. ft. 12-in. sewer, 6 manholes and 1 catch-basin, etc.; bids received until Sept. 18 (extended date); P. F. McDonald, City Commissioner; recently noted. (See "Roads and Streets" and "Machinery Wanted.")

Tenn., Memphis.—City will construct following drainage work on Melrose St. and Harbert Ave. and Harbert Ave. west of Willett St.: 730 lin. ft. 3x3 ft. concrete culvert; 125 lin. ft. 27-in., 40 lin. ft. 24-in. and 110 lin. ft. 15-in. pipe, 0 ft. to 6 ft. cut; 4000 sq. ft. concrete sidewalk replaced; 106 sq. yds. gravel pavement replaced; 6 No. 7 inlets; 1 No. 6 inlet and 2 manholes; bids received until Sept. 2 for labor, tools, hauling and material (except vitrified pipe, manholes and inlets rims and covers, which will be furnished by city); Ennis M. Douglas, clerk. (See "Machinery Wanted.")

Tenn., Nashville.—Board Public Works let contract Minna-Sneed Company at \$13,136 to construct Belmont Heights trunk sewer from Belmont St. to Portland Ave. and Belmont Blvd.; 2200 ft.; sewer to be brick, 48, 42, 36 and 30-in. pipe; \$16,000 appropriated. (Call for bids lately noted.)

Tex., Bishop.—City voted \$23,000 bonds to purchase sewer system recently completed by Frank Z. Bishop. (Lately noted.)

Tex., Dallas.—City Engrs. completed preliminary surveys preparatory to constructing trunk sewer system to divert sewage from Trinity River and building disposal plant; forwarded data to James H. Fuertes, hydraulic engineer, 140 Nassau St., New York, who will prepare plans and specifications; purchased 102.4 acres in Trinity River bottoms 3 miles from city limits; expected at first to use only 40 acres; install centrifugal pump; first plant to dispose of 10,000,000 gals. sewage daily; authorized \$550,000 bond issue; J. M. Preston, City Engr. (Previously noted.)

Tex., El Paso.—City let contract to Arthur S. Bent Construction Co., Central Bldg., Los Angeles, Cal., at \$39,000 to construct concrete sewer in Durango St.

W. Va., Parkersburg.—City let contract R. T. Martin to construct sanitary sewers. (Call for bids lately noted.)

**TELEPHONE SYSTEMS**

Ky., Mt. Vernon.—Mt. Vernon Telephone Co., capital \$1000, incorporated by James Maret, Wade H. Graves and J. F. Dees.

Ky., Paris.—Paris Home Telephone & Telegraph Co., capital stock \$30,000, incorporated by Samuel W. Heller and Joshua D. Powers, Louisville; Edward H. Cary, Toledo, O., and others; acquired Bourbon Home Telephone Co.'s system.

Va., Stuart.—Farmers' Telephone Co. incorporated; H. L. Wimbish, Prest.; A. W. Williams, V.-P.; Stuart; W. M. Tatum, Secy., Stella, Va.; capital \$4983; will acquire Patrick County Telephone Co. and operate telephone system in Patrick, Floyd and Henry counties.

**TEXTILE MILLS**

Ga., Toccoa.—Cotton Yarn.—Capps Cotton Mills will add 2000 spindles; has let contract.

N. C., Laurel Hill.—Cotton Yarn.—Ralph Morrison will, it is reported, organize company to build 4000-spindle cotton yarn mill.

N. C., Newton.—Hosiery.—Fidelity Hosiery Mills will enlarge plant.

N. C., Stateville.—Hosiery.—Walton & Son, Rocky Mount, N. C., will establish hosiery mill; have building and machinery.

Okla., Oklahoma City.—Knit Goods.—New State Shirt & Overall Manufacturing Co. will add department for manufacturing knit goods; has ordered machinery.

S. C., Columbia.—Absorbent Cotton.—Southern Aseptic Cotton Co. will rebuild plant lately noted burned at \$50,000 loss; let contract Seastrunk Contracting Co., 1218 Washington St., construct building; much of machinery not damaged by fire. (Lately noted.)

S. C., Clinton.—Cotton Yarn.—Lydla Cotton Mills will add 6 spinning frames; has let contract.

Tenn., Morristown.—Hosiery.—Holston Manufacturing Co., Lenoir City, Tenn., will erect 20x30 ft. 1-story brick building and install hosiery knitting equipment; reported investment \$50,000. (Lately noted.)

**WATER-POWER DEVELOPMENTS**

Ala., Birmingham.—Alabama Power Co., W. W. Freeman, Gen. Mgr., merged with Alabama Electric Co., Wetumpka Power Co., Alabama Power & Electric Co. and Alabama Power Development Co.; \$30,000,000 capital stock; \$20,000,000 bonds; Alabama Power Co. now progressing with Coosa River Lock 12 development, where will generate 105,000 H. P.; 4 other companies named own undeveloped Coosa River power sites; all companies named have been under management Alabama Traction, Light & Power Co., James Mitchell of London, Prest.; future plans involve developments making total H. P. 400,000 and ultimately 1,227,000 H. P. for electrical transmission. (Development details heretofore reported.)

Tenn., Tullahoma.—Tennessee Utilities Co. will expend \$150,000 to construct hydro-electric plant; 20,000 H. P.; cement construction; all surveys not completed; not ready for bids before Nov. 1; G. M. Whitson, Prest. and Asso. Engr.; E. B. Blackman, Secy. (Recently noted incorporated.)

Tex., Crystal City.—Alexander Boynton advises: Earth dam across Neuces River in Zavalla county now ready for construction; 42-in. concrete pipe line, with 42-in. gate valves and turbine water-wheel connections for developing 120 H. P. completed; no acceptable bid yet received for building dam, which will be 53 ft. high, 20 ft. crown, 400 ft. long; up-stream slope 3 to 1; down-stream, 2 to 1; about 25,000 yds. earth; now contemplating hydraulic dredge construction; previously noted under Miscellaneous Construction, etc. (See "Machinery Wanted.")

W. Va., Bluefield.—Appalachian Power Co., A. P. Tallaferro, Secy., New York, called meeting Sept. 8 at office, 318 Mutual Bldg., Richmond, Va., to consider proposition issue \$2,000,000 bonds; development details heretofore stated; has 2 hydro-electric plants on New River developing 29,000 horse-power, 257 miles high-tension transmission system, etc.; plans 3 other developments furnishing 51,000 horse-power; regarding new bonds, Mr. Tallaferro wires Manufacturers Record: "Not prepared furnish particulars at present time." H. M. Byllesby, 206 LaSalle St., Chicago, is Prest. and Ch. Engr.

W. Va., Rockville.—Hydro-Electric Co. of W. Va., W. S. Kuhn, Prest., Bank for Savings Bldg., Pittsburgh, Pa., has preliminary plans to construct dam and power-house on Big Sandy Creek; concrete dam 1600 ft. long, 200 ft. high; power-house 100x60 ft.; concrete-lined tunnel 9 ft. in diameter; machinery to include 3 water turbines, etc.; generate 65,000 electrical H. P.; estimated cost \$5,000,000.

**WATER-WORKS**

Ala., Selma.—City will extend water mains to northern section. Address The Mayor.

Fla., Punta Gorda.—City votes Oct. 7 on \$21,000 bonds for water-works; plans call for 50,000-gal. standpipe 100 ft. high, 60,000-gal. reservoir water softener to be used in connection with present 6-inch flowing well to pump 72,000 gals. daily; Hiram McElroy, engr., Box 712, Tampa. (Lately noted.)

Ga., Austell.—City voted \$12,000 bonds for water-works. Address The Mayor. (Lately noted.)

Ga., Cordele.—City receives bids until Sept. 18 to furnish materials, except pipe, and lay 3 miles water mains, construct reinforced concrete reservoir (250,000 gals. capacity), brick pumping station, 48-in. by 50-ft. brick or concrete circular stack; install 100,000-gal. tank and tower, 1,500,000-gal. pumping engine, two 72x18 pressure R. T. boilers, 350 ft. comp. duplex air compressors, 30 gate valves, 30 fire hydrants, 350 tons C. I. pipe, principally 8 in.; G. S. Harris, City Clk.; Arthur Pew, Consulting Engr., Atlanta, Ga.; lately noted. (See "Machinery Wanted.")

Ky., Campbellsville.—Campbellsville Water & Light Co. organizing to construct water-works and electric-light plant.

La., Alexandria.—City will make extension to water-works; install 4000 lin. ft. cast-iron water main; Mr. Sylvester, engineer in charge. (Contract lately noted awarded to New Orleans Well Drilling Co. for drilling artesian well furnishing not less than 100,000 gals.)

Ky., Louisville.—Louisville Water Co., Theodore A. Lelsen, ch. engr., will expend \$200,000 to construct 36,000,000-gal. filtration plant; mechanical filter; concrete; latter furnished by company; bids opened Sept. 23; previously noted. (See "Machinery Wanted.")

La., Hammond.—City considering \$120,000 bonds to extend water-works, construct

sewer system, etc.; T. R. Thames, Commr. Finance.

Miss., Jackson.—City will construct proposed filtration plant and stations; bids received until Sept. 24; 2 pumping stations and mechanical filtration plant; work comprises contracts Nos. 1, 2, 3, 4, 5, 5-A-B-C-D, 5-E, 6, 7, 8, 9 and 10; Massena L. Culley, City Engr.; L. J. Monahan, City Clerk. (See "Machinery Wanted.")

Mo., Hamilton.—City considering constructing water-works; James O. Thornton, City Clerk.

Mo., Maryville.—City let contract E. Y. Davis & Son, Albany, Mo., at \$6615 to build filter-house, additions to boiler-room and roof for pumping station.

Mo., Maitland.—City voted \$15,000 bonds to construct water-works. Address The Mayor. (Lately noted having plans, etc., estimating cost at \$14,800.)

Mo., Golden City.—City will issue \$12,000 bonds to construct water-works. Address The Mayor.

Okla., Cleveland.—City retained Benham Engineering Co., engr., Oklahoma City, Okla., to make investigations relative to water-works construction.

N. C., Weldon.—City let contract to construct water-works and sewer system; about 20,000 ft. of sewer, 6 to 12 in.; 20,000 ft. class "C" water pipe, 4 to 10 in.; settling basin, earth embankment with concrete core wall; clear-water pit, concrete wall and bottom; concrete foundation for pump-house; filter, capacity 500,000 gals. per day; steel tank and tower, 80,000 gals. capacity, height 80 ft. to balcony; electrically-driven centrifugal pumps and motors, capacity about 750 gals. each per minute against 60 lbs. pressure; W. C. Riddick, consulting engr., West Raleigh, N. C. (Call for bids lately noted.)

Tenn., Lewisburg.—City will issue \$20,000 water-works bonds; C. C. Houston, Mayor.

Tex., Range.—City voted \$20,000 bonds for water-works and electric-light plant. Address The Mayor. (Lately noted.)

**WOODWORKING PLANTS**

Ark., Piggott.—Staves.—Meyers Stave & Mfg. Co., capital \$25,000, incorporated; J. M. Meyers, prest.; J. R. Meyers, V.-P.; G. W. McMillan, secy.-treas.

La., Lake Charles.—Veneer.—Lake Charles Veneer Co. has incorporated.

Tenn., Harriman.—Shuttles and Robbins.—J. M. Norris & Sons let contract Geo. T. Hood Contracting Co. to erect shuttle and bobbin factory; main building, 40x100 ft. (Previously noted.)

**BURNED**

Ala., Dyas.—Fisher Lumber Co.'s sawmill; loss \$1800.

Ala., Tyler.—William Moore's gin; loss \$2000.

Ark., Ashdown.—Little River Bank; Sanderson Bldg.; H. L. Toland & Co.'s warehouse; total loss about \$75,000.

Ark., Calico Rock.—Clint Wilson's sawmill.

Ark., Hiwassee.—G. S. Banks' store; loss \$6500.

Ark., Little Rock.—W. T. Veasy's residence 222 Arkansas Ave.; loss \$3000.

Ark., Siloam Springs.—George Fretwell's residence; loss \$9000.

Fla., Espanola.—P. L. Sutherland's shingle plant; loss \$70,000.

Fla., Live Oak.—Mr. Fletcher's gin.

Ga., Waycross.—George W. Barnes' residence on Jane St.; loss \$3500.

Ky., Corbin.—Stores of Nicholson & Foley; A. W. Green & Co.; Archers' pharmacy; J. D. Silver's grocery; Louisville Dry Goods Co.; Center Street Drug Co.; Heath's grocery; Central Hotel; Old Kentucky Hotel, and Mrs. Merle Fall's residence; loss \$250,000.

Ky., Franklin.—Cannery owned by C. F. Saunders and V. O. Gilbert of Frankfort, Ky.; loss \$6000.

Ky., Henderson.—People's Laundry, owned by Moss Johnson.

Ky., Leitchfield.—Timothy Hogan's store; loss \$4000.

Ky., Maysville.—Wellburn Rees's residence; loss \$3000.

Ky., Westpoint.—N. G. Bishop's store and residence; loss \$6000.

La., Cotton Valley.—Porter Wabley & Co.'s planing mill; loss \$40,000.

La., Franklinton.—John Alford, Sr.'s, residence; loss \$5000.

La., Pine Cliff.—Pine Cliff Lumber Co.'s plant; loss \$2500.

La., Shreveport.—Chas Bryan's screen factory; residences of John Johnson, John E. Levy, Jas. F. Hiser, Jr., Mrs. Annie McGuirk; total loss \$12,000.

La., West Lake.—Krause & Managan Lumber Co.'s drykiln; loss \$5000.

Mo., Easton.—Three buildings of Samuel Norris, one of Philip Hopkins, rear buildings of Emergency Hospital and building of Wm. E. Linderum; total loss about \$15,000.

Mo., Hagerstown.—McHenry Bros.' livery stable; loss \$10,000.

Miss., Long Beach.—Island View Hotel, owned by J. P. Rouse, and Mrs. Stevenson's residence.

Miss., Natchez.—Natchez Auto & Supply Co.'s plant; loss \$12,000.

N. C., Vander.—E. S. and D. T. McDaniel's sawmill, etc.; loss \$1600.

Okla., Chelsea.—W. J. Strange's grain elevator; loss \$35,000.

Okla., Fairfax.—Badger-Hudson elevator; loss \$12,000.

S. C., Columbia.—City's warehouse, W. F. Stieglitz, custodian; loss \$3000.

S. C., Ridgeland.—Store of W. S. Collier, residence of O. W. Ellis and Jasper County Dispensary; loss \$15,000.

Tenn., Columbia.—Maury Dry Goods Co.'s store; Bogatsky & Bauman's building; Evans, Parker & Moore's building; Columbia Motor & Implement Co.'s garage; Dobbs & Ewing's warehouse, loss \$3000; total loss about \$300,000.

Tenn., Jackson.—J. J. Riggs & Co.'s gin and grist mill; loss \$2000.

Tenn., Knoxville.—Lewis & Adcock's mill; loss \$47,000.

Tenn., Nashville.—J. A. Moore's printing plant damaged; loss \$2500.

Tenn., Tellico Plains.—Tellico Lumber Co.'s saw and planing mills and drykiln; loss \$150,000.

Tenn., Whitwell.—Burt Kimbro's restaurant; D. T. Layne & Co.'s drug store, loss \$10,000; Whitwell Drug Co.'s building, loss \$5000; Dr. J. Seay's office; Henry Lane's store.

Tex., Altoga.—Watkins, Mantooth & Anderson's store; loss \$15,000.

Tex., Beaumont.—Jossey Hill Co.'s warehouse; loss \$29,000.

Tex., Bertram.—M. L. Ussery's and A. Sylvester's residences; loss \$4000.

Tex., Larue.—Miller, Gentry & Costlow's gin; loss \$9000.

Tex., Denton.—Dr. J. L. Hooper's residence, owned by R. J. Wilson.

Tex., Hearne.—National Compress Co.'s plant.

Tex., Lockhart.—Polander Gin Co.'s plant; loss \$6000.

Tex., Palestine.—Texas Light & Power Co.'s plant.

Va., Pardee.—Seven cottages of Pardee Cox! Co.; loss several thousand dollars.

Tex., Stamford.—Stamford Mill & Elevator's grain elevator; loss \$12,000.

Tex., Teague.—Trinity & Brazos Valley Railway's shops; J. W. Robins, Gen. Mgr., Houston, Tex.; estimated loss, \$225,000.

Va., Bealeton.—R. E. Lee's store and dwelling; J. M. Price's store and dwelling.

Va., Chesterfield County.—"Meadowbrook," residence of Thos. F. Jeffers, Prest.; Crystal Ice Co., Richmond; loss \$40,000.

Va., Wytheville.—Otey Hotel, owned by C. N. Otey; 2 buildings of Tinkle Bros.

W. Va., Charleston.—Charleston Milling & Produce Co.'s plant.

#### DAMAGED BY STORM

Tex., Luling.—Brown Bros.' store, J. W. Allen's gin.

Pietsch, American Bldg.; Parker, Thomas & Rice, Union Trust Bldg., and Otto G. Simonson, Maryland Casualty Tower, to submit competitive plans for clubhouse; 61x156 ft.; cost about \$300,000. (Lately noted.)

Miss., Starkville.—Young Men's Christian Association of Agricultural and Mechanical College accepted plans for association building. (See "Schools.")

N. C., Asheville.—Elks' Home Co., F. R. Hewitt, Prest., invites architects to submit competitive plans for lodge and store building; 60x110 ft.; brick and concrete; hot-water or steam heat; cost \$40,000 to \$50,000. (Recently noted.)

Tenn., Nashville.—Cumberland Lodge, Ancient Free and Accepted Masons, will erect temple 319 Seventh Ave. N.

Tex., El Paso.—Young Men's Christian Association will not, at present, erect addition to building.

Va., Portsmouth.—Young Men's Christian Association has plans by Louis E. Jallade, 37 Liberty St., New York, and opens bids Sept. 23 to erect building; 4 stories; 113x86 ft.; pressed brick, with stone and marble trimmings; entrance hall, 58 ft. long, 39 ft. wide; swimming-pool, 20x60 ft., 9 ft. deep; gymnasium, 82x40 ft.; seating capacity 750; 89 dormitories; cafeteria, bowling alleys, etc.; steam heat; trunk lift; gravel roof; cost about \$80,000; E. R. Barksdale, Chrm. Bldg. Comm. (Previously noted.)

Va., Richmond.—Fraternal Order of Eagles has plans by Asbury & Whitehurst, 110 N. 7th St., for clubhouse; stone and brick; cost \$30,000; 4 stories; 52x88 ft.; ordinary construction; hot-water heat; elevator; Barrett's specification roof; plans out about Oct. 1.

#### BANK AND OFFICE

Ark., Little Rock.—Bankers' Trust Co., H. L. Remmel, Prest., is having plans prepared for office building; 3 stories; 35x70 ft.

Ark., Mount Ida.—Scott & Brakefield and Radford & Waycaster will erect office and store building; 2 stories; brick.

Fla., Fort Myers.—H. E. Heitman opens bids Sept. 8 to erect office and store building. (See "Stores.")

Fla., West Palm Beach.—West Palm Beach Board of Trade incorporated; \$30,000 capital stock; W. H. Da Camara, V.-P.; will erect building next spring or summer. (Recently noted.)

Fla., Plant City.—Zephyrhills State Bank will erect building; pressed brick.

La., Independence.—Adam Kluchin opens bids about Sept. 10 to erect office, store and lodge building. (See "Stores.")

Md., Baltimore.—Loyola Perpetual Building Association has plans by C. M. Anderson, 325 N. Charles St., to remodel and enlarge building at Charles and Preston Sts. for office; contractors estimating are J. J. Walsh & Sons, 1533 Maryland Ave., and C. C. Watts, 113 Hamilton St. (Lately noted.)

Tenn., Maryville.—Bank of Maryville receives bids until Sept. 12 to complete bank and office building; plans and specifications at office Baumann Bros., architects, Knoxville; Tennessee marble and pressed brick; 25x100 ft.; two stories and basement; ordinary construction; steam heat; electric lights; gravel roof; cost \$15,000; A. K. Harper, Chrm. (Recently noted.)

Tex., El Paso.—First National Bank let contract Otto P. Kroeger & Co. to erect bank and office building; 7 stories; 64x120 ft.; fireproof; rubberoid roofing; hot-water heat; elevator; cost \$120,000; plans by Trost & Trost. (Previously noted as American National Bank.)

Va., Portsmouth.—Seaboard Air Line Railway Co., W. D. Faucette, Chief Engr., will, it is reported, expend \$20,000 to enlarge office building.

Va., West Point.—West Point National Bank contemplates erecting building.

W. Va., Charleston.—Frankenberger estate has plans for store, office and loft building. (See "Stores.")

#### CHURCHES

Ala., Fairfield.—Methodist Episcopal Church South organized with Rev. George Younger, pastor; will erect \$25,000 church and \$10,000 Sunday-school building.

Ala., Tuscaloosa.—First Methodist Episcopal Church has plans by R. H. Hunt, James Bldg., Chattanooga, Tenn., for building; cost \$40,000.

Ky., Erlanger.—Christian Church will erect \$3500 addition. Address The Pastor, Christian Church.

Md., Baltimore.—Lee Street Baptist Church will erect building Warren Ave.; 2

stories; brick; stone trimmings; cost \$25,000; contractors estimating R. H. Frazier & Son, 316 N. Howard St.; E. D. Springer & Co., 424 S. Charles St.; Minor Bros., 224 W. Pratt St.; E. L. Walsh, 22 Clay St.; A. J. Boteler; will award contract Sept. 10; plans by Frank R. Riley, 2436 Edmondson Ave.

Mo., St. Louis.—Gospel Tabernacle will erect 1-story building 4041-43 Cote Brillante; cost \$8000. Address The Pastor, Gospel Tabernacle Church.

Tenn., Jackson.—First Presbyterian Church contemplates erecting building. Address The Pastor, First Presbyterian Church.

Tex., Lockhart.—German Lutheran congregation will erect building. Address The Pastor, German Lutheran Church.

Tex., Temple.—Grace Presbyterian Church will erect building. Address The Pastor, Grace Presbyterian Church.

Va., Parksley.—Baptist Church having plans prepared by Charles W. Bolton, Witherspoon Bldg., Phila., for Sunday-school addition; Zion Baptist Church also conferred with Mr. Bolton relative to plans for building about 3 miles from Parksley; cost \$10,000.

W. Va., Wheeling.—Clinton M. E. Church, W. H. Nickerson, Chrm. building committee, is receiving bids to erect church; plans by G. H. Dieringer.

#### CITY AND COUNTY

Fla., Jacksonville.—City Hall.—City will repair city hall; enclose court in rear to provide additional space; cost \$3800. Address The Mayor.

Fla., Lake City.—City Hall.—City voted \$5800 bonds to erect city hall. Address Mayor Julian. (Lately noted.)

Fla., St. Petersburg.—Woman's Building.—City will not erect woman's building for which \$7400 bonds were recently reported to be voted on Oct. 7; C. D. Hammond, Comm. Public Works and Utilities.

Ky., Lexington.—Jail.—City has plans by Harry Schoonmaker for jail for women; 50x30 ft.; basement; stone construction; cells on upper floor.

La., New Orleans.—Warehouses.—Board of Port Commissioners enacted ordinance providing issuance of \$3,000,000 bonds to erect 6 warehouses. (See "Warehouses.")

Md., Cumberland.—Police Station.—City has plans by Wright Butler and will soon invite bids for police station; 3 stories; 49x35 ft.; brick, stone trimmings; concrete foundation; building will contain courtroom, 32x16 ft.; 12 ft. ceiling; cell rooms to have 8 steel cages; concrete floors. (Lately noted.)

Mo., Joplin.—Auditorium.—City, F. M. Wooden, Mayor, opens bids Sept. 8 to erect auditorium and for steam heating; plans and specifications at office of E. B. Cline, City Aud., City Hall Bldg. (Lately noted.)

Mo., Joplin.—Market.—City has plans by A. C. Michells to erect market-house at 12th and Market Sts.; contract awarded about Sept. 15.

N. C., Black Mountain.—City Hall.—City plans to erect city hall; 2 stories; brick; lower floor for fire department; several steel cells in rear. Address The Mayor.

N. C., Greenville.—Home.—Pitt County Commissioners contemplate building county home.

Okla., Tulsa.—Auditorium.—City, F. M. Wooden, Mayor, receives bids until Sept. 8 to erect auditorium, including heating; plans by Rose & Peterson, Kansas City, Kan. (Lately noted.)

S. C., Columbia.—Jail.—Richland County Commissioners rejected all bids to erect jail; receive new bids Sept. 2; reinforced concrete construction; plans by Hamby & Rorke, Sylvan Bldg. (Lately noted.)

S. C., Gaffney.—Library.—City has plans by Hamby & Rorke, Sylvan Bldg., Columbia, for Carnegie library; 2 stories; brick; cost \$7500. (Previously noted.)

Tenn., Nashville.—Library.—City accepted plans by C. K. Colley for North Nashville branch library. (Previously noted.)

Tenn., Ridgedale, Branch of Chattanooga—Fire Station.—City contemplates erecting fire station; T. C. Betterton, Commissioner.

Tex., Calvert.—City Hall.—City, H. P. Johnson, Secy., receives bids until Sept. 15 to erect 2-story brick city hall; plans and specifications at office of Secretary Johnson and Edw. H. Reed, Waco. (Contract recently noted awarded.)

Tex., Yorktown.—City Hall.—City voted \$8000 bonds for city hall. Address The Mayor. (Lately noted.)

W. Va., Huntington.—Fire Station.—City rejected bids and will open new bids Sept. 15 to erect fire station; 90x140 ft.; W. B.

## BUILDING NEWS

### BUILDINGS PROPOSED

#### APARTMENT-HOUSES

Ga., Columbus.—Ascher Solomon has plans for apartment-house and store; four five-room apartments; cost \$16,000.

Ga., Savannah.—Mrs. E. S. Shore will erect apartment-house; four apartments.

Md., Baltimore.—Mrs. Elizabeth Burton, care Charles Morton, 209 St. Paul St., purchased site at McCulloh and Robert Sts. and will erect apartment-house.

Md., Baltimore.—Idon Realty Co., represented by Joseph Berman, 231 Courtland St., purchased site on Lake Front near Druid Hill Park and will erect apartment-house; 5 stories; brick and concrete; cost \$100,000.

Mo., St. Louis.—A. Koszenski will erect 2-story apartment on Nebraska Ave.; cost \$3500.

Mo., St. Louis.—Deschinger & Kircher will erect apartment-house at 4291-03 N. 21st St.; 2 stories; cost \$4500.

Mo., St. Louis.—F. L. Dittmeier will erect apartment-house and store 4291-03 Gano St.; cost \$5500; also 2-story tenement 4250 Holly St.; cost \$3500.

Mo., St. Louis.—Theodore Degenhardt will erect apartment-house 3129 Morgan Ford; 2 stories; cost \$5000.

Mo., St. Louis.—Mrs. Maria M. Deitering is having plans prepared by Charles H. Deitering for apartment-house, Grand and Elch-elberger Aves.; colonial style; four 5-room suites; sleeping porches front and rear; 90x45 ft.; vacuum cleaning system.

Mo., St. Louis.—A. J. McGowan will erect apartment-house 5220-22 N. Market St.; 2 stories; cost \$6500.

Mo., St. Louis.—Swiss Chalet Investment Co. is having plans prepared by Chas. H. Deitering, St. Louis, for 2 apartment-houses North Parkview; cost \$20,000 each.

Mo., St. Louis.—George Neff will erect 2-story tenement-house 4646-50 Labadie St.; cost \$5000.

Mo., St. Louis.—Jacob Rubin has plans for 2 double apartment-houses 3301-07 Wyoming St.; 4 suites of 3 rooms and bath, each bedroom equipped with folding bed; matt brick construction; porches and bathrooms tiled; hardwood floors; combination fixtures; cost \$15,000.

Mo., St. Louis.—Christian Brickop Real Estate Co. will erect 4 single apartment-houses on Virginia Ave.

Mo., St. Louis.—Louis Mueller will erect apartment-house 3579 Wyoming Ave.; 2 stories; cost \$4500.

Mo., St. Louis.—F. A. Temme will erect 2-story apartment-house 2849-51 Potomac Ave.; cost \$5000.

Mo., St. Louis.—V. Moore will erect apartment-house 3665 Blaine St.; 2 stories; cost \$4000.

Mo., St. Louis.—M. Rinehart will erect apartment-house at 3956 De Tonty St.; 2 stories; cost \$5000.

Mo., St. Louis.—Gerhard Segbert will erect apartment-house at 5240 Alaska St.; 2 stories; cost \$3000.

Mo., St. Louis.—Eugene C. Hardy will erect 2-story apartment-house at 3944 Pennsylvania Ave.; cost \$3000.

Mo., St. Louis.—H. Schillingmann will erect apartment-house at 1409-11 Newhouse St.; 2 stories; cost \$5000.

Mo., St. Louis.—L. Kielsmeier will erect apartment-house at 5306-08 Murdock St.; cost \$4750.

S. C., Columbia.—Frank Semmes has plans for apartment and store building. (See "Stores.")

Tex., Houston.—Isadore Goringer will erect apartment and store on Washington St.; cost \$3000.

Tex., Houston.—Mrs. F. W. Hogg is having plans prepared by Jones & Taber for apartment-house 1408 Dallas Ave.; 2 stories; 8 three-room suites; stucco; Spanish mission style; 100x38 ft.; cost \$9000.

Va., Norfolk.—Dr. R. R. Robertson will erect 2 tenement-houses Queen St.

W. Va., Wheeling.—Mr. Hasenauer is having plans prepared by G. H. Dieringer for apartment-house on S. Eoff St.; 3 stories; brick.

W. Va., Wheeling.—H. Swierkose is having plans prepared for apartment-house and store. (See "Stores.")

#### ASSOCIATION AND FRATERNAL

La., Independence.—Adam Kluchin opens bids about Sept. 10 to erect lodge, store and office building. (See "Stores.")

Md., Baltimore.—Benevolent Protective Order of Elks, 307 W. Fayette St., invited Wyatt & Nolting, Keyser Bldg.; John K. Stack, 12 E. Lexington St.; Theodore Wells



Smith, architect. (Recently noted to cost \$25,000.)

W. Va., Huntington.—City Hall.—City Commissioners open bids Sept. 25 to erect city hall; plans and specifications at office of Verus T. Ritter, architect; certified check for \$1000; receive separate bids until same date for plumbing, gasfitting, heating and ventilating; certified check for \$200 with each bid. (Recently noted.)

### COURTHOUSES

Mo., Tusculum.—Miller County Commissioners open bids Sept. 15 to erect courthouse; W. E. Martin, County Treas. (County lately noted voting \$10,000 bonds to complete courthouse.)

### DWELLINGS

Ala., Birmingham.—W. G. Oliver will erect 17 1-story frame dwellings at Tenth Ave. and 23d St. North; cost \$6800.

Ala., Birmingham.—L. B. Leftwich will erect two 2-story veneer dwellings on Hanover Circle; cost \$6000.

Ala., Dullin.—Co-operative Coal Mining Co. is having plans prepared for 50 miners' dwellings; cost \$400 to \$500 each.

Ala., Ensley.—Geo. A. Miller will erect dwelling at Hill Top Station; 2 stories; frame; cost \$8000.

Ark., Conway.—Hendrix College will let contract in month to erect president's residence; 84x54 ft.; ordinary construction; steam heat; tile roof; cost \$12,000; plans by C. L. Thompson, Little Rock; proposals addressed to J. A. Reynolds. (Recently noted.)

Ark., Little Rock.—W. A. South will erect 2-story brick residence, Midland Hills; cost \$5000.

Ark., Little Rock.—Wm. Peterson will erect 2-story brick veneer residence 2100 Gaines St.; cost \$10,000.

D. C., Washington.—Harry B. Kite, 1333 G St. N. W., will erect 12 dwellings 1300-1322 C St. N. W.

D. C., Washington.—H. A. Vieth, Columbian Bldg., will erect two two-story frame dwellings 3211-3215 Central Ave. N. E.; cost \$4000.

D. C., Washington.—Charles F. McKenney, 3551 Piney Branch Rd. N. W., will erect two-story brick dwelling 8th and Butternut Sts.; cost \$4500.

D. C., Washington.—Simon Oppenheimer, Southern Bldg., will erect two two-story brick dwellings 656 Orleans Pl. N. E., and 631 Florida Ave. N. E.; cost \$4750.

Fla., St. Petersburg.—Harold W. Gilbert, R. F. D. No. 1, has not definitely determined plans for residence; probably install electric lights; shingle or tile roof. (Recently noted to cost \$5000.)

Fla., West Palm Beach.—A. Oswald will erect residence.

Ga., Augusta.—Palmer & Magruder will erect 3 frame cottages at Gwinnett and Emmett Sts.; frame; cost \$3000.

Ga., Savannah.—Frank H. May will erect residence on North Henry St.

Ga., Savannah.—R. L. Kersh will erect residence in Avon Park.

Ga., Savannah.—Col. Shelby Myrick has plans by Olaf Otto for residence; 2 stories; red pressed brick; colonial style; concrete porches; porte cochere leading to driveway; steam heat.

Ky., Hazard.—Hazard-Dean Coal Co., S. Davis Hughes, Supt., will erect 50 dwellings and commissary building; lately noted. (See "Coal Mines & Coke Ovens.")

Ky., Louisville.—Charles Vaupel will erect residence at 2521 Ransdell Ave.; cost \$4500.

Ky., Louisville.—A. S. Prinz will erect residence 1434 Cherokee Rd.; brick; cost \$10,000.

Ky., Louisville.—Alfred Struck Co. will erect residence on Sherwood St.; brick; cost \$7500.

Ky., Louisville.—Richard Whelen will erect dwelling at 1403 Hepburn Ave.; brick; cost \$3500.

Ky., Louisville.—L. Jacobson will erect 4 frame cottages at 825-833 S. 34th St. to cost \$1900, and 2 frame cottages at 3408-10 Garland Ave. to cost \$2000.

Ky., Maysville.—Mrs. John Hall is having plans prepared by J. W. Crone, Winchester, Ky., for residence; 2 stories, attic and basement.

La., New Orleans.—Mrs. M. F. Brou will erect double frame cottage on Lepage St.; cost \$3000.

La., New Orleans.—Harry Howcott will erect residence on Cohn St.; frame; cost about \$3000.

Md., Baltimore.—Eugene T. Shoop, 440 Whitridge Ave., will erect residence on Fair Oaks Ave.; 2½ stories; frame.

Md., Baltimore.—H. Rowland Clapp, 1226 N. Calvert St., will erect residence at Guilford; contractors asked to estimate: Gladfelter & Chambers, 2074 Woodberry Ave.; G. Walter Tovell, Eutaw and Dolphin Sts., both of Baltimore, and Roland Park Co., 408 Roland Ave., Roland Park, Md.; plans by Ed. L. Palmer, 408 Roland Ave., Roland Park. (Lately noted.)

Md., Baltimore.—John F. Carter, Ellamont Ave., has plans by Stanislaus Russell, 2900 Clifton Ave., for 23 dwellings on Bentalou St.; 2 stories; 14x50 ft.; steam heat; iron-spot brick; electric lighting; tin roof; cost \$1500 each; also 5 2-story dwellings Walbrook Ave.; brick; 14x44 ft.; cost \$8000; construction by owner.

Md., Baltimore.—Manlee Realty Investment Co., 27 Law Bldg., will erect dwellings on Fairview Ave.

Md., Baltimore.—Joseph L. White Realty Co., 1601 Broadway, has plans by Charles C. Broring, 9 N. Potomac St., to erect 300 dwellings in 2900, 3000 and 3100 blocks E. Monument St.; 2 stories; brick; ordinary construction; 14x70 ft. (Lately noted.)

Md., Catonsville.—W. Edward Harris, Chamber of Commerce Bldg., Balto., will expend \$8000 to erect residence; 52x33 ft.; mill construction; tile and concrete; stone from foundation to second floor; hot-water heat; electric lighting; shingle roof; plans by Geo. R. Callis, Jr., 55 Knickerbocker Bldg., Baltimore; now ready for bids. (Lately noted.)

Md., Roland Park.—John B. Whitehead opens bids Sept. 11 to erect dwelling; frame and stucco; contractors estimating: Roland Park Co., Roland Park; Cowan Building Co., 106 W. Madison St.; Willard E. Harn Co., 213 N. Calvert St.; J. J. Moylan, 117 E. Center St.; Gladfelter & Chambers, 2074 Woodberry Ave., all of Baltimore; Israel Owens, Mt. Washington, Md.; plans by L. H. Fowler, 347 N. Charles St. (Previously noted.)

Md., Roland Park.—C. E. Morgan has plans by Ed. L. Palmer, Jr., 408 Roland Ave., Roland Park, Md., for residence.

Md., Roland Park.—Gerard Emory Morgan, The Esplanade, Baltimore, has plans by Edw. L. Palmer, Jr., 408 Roland Ave., for residence; contractors to estimate are Gladfelter & Chambers, 2074 Woodberry Ave.; G. Walter Tovell, Eutaw and Dolphin Sts., Edw. Watters & Co., 509 N. Charles St., Baltimore; Roland Park Co., 408 Roland Ave., Roland Park.

Mo., Kansas City.—Elmer A. McMurtry, mgr. Columbia Phonograph Co., will erect residence 6028 Wyandotte St.

Mo., Kansas City.—Chas. W. Smith will erect residence 222 W. 62d St.

Mo., St. Louis.—Harry B. White will erect 10 5-room brick cottages Elmer Ave.; cost \$3000 each.

Mo., St. Louis.—Sam Marx will alter dwelling 822-24 Salisbury St.; cost \$3500.

Mo., St. Louis.—Mutual Realty Co. will erect 2 one-story dwellings 4458-60 Lee St.; cost \$4000.

Mo., St. Louis.—Frank Kraft will erect 4 one-story dwellings 1000-04 and 1017-19 Tillie St.; cost \$3200 each.

Mo., St. Louis.—H. C. Watson will erect residence on Perlin Ave.; 7 rooms; cost \$6500.

N. C., Asheville.—Mrs. Elize M. Little will erect residence Grove Park.

N. C., Asheville.—Mrs. Mary Duffield Hilliard will erect residence Grove Park.

N. C., Asheville.—W. W. Turnbull will erect residence Grove Park.

N. C., Asheville.—J. Rush Oates will erect residence Grove Park.

S. C., Columbia.—Summersett & Driggers will erect dwelling at Wheat and Woodrow Sts.; 7 rooms; cost \$6000.

S. C., Columbia.—E. T. Summersett will erect dwelling on Senate St.; cost \$5000.

S. C., Orangeburg.—L. C. A. Roessler will erect two residences.

Tenn., Chattanooga.—J. Brown is having plans prepared by J. D. Alsop, James Bldg., for residence at Riverview; colonial; six rooms; two baths; steam heat; cost \$7000.

Tenn., Knoxville.—Dr. S. H. Keener will erect residence W. Clinch Ave.; frame; cost \$5000.

Tenn., Nashville.—N. N. Davidson will erect brick building 813 Russell St.; cost \$4000.

Tenn., Nashville.—J. W. Sneed will erect brick-veneer building 1608 17th Ave. S.; cost \$3000.

Tex., Bloomington.—E. H. Bell will erect residence.

Tex., Fort Worth.—C. Allenginger will erect residence at 3127 Lipscomb St.; frame; cost \$3000.

Tex., Georgetown.—S. A. Easley will erect residence.

Tex., Dallas.—W. N. McCarvey will erect 12-room 2-story frame dwelling 516 Germania St.; cost \$3000.

Tex., Dallas.—E. W. Burch will erect 2-story 8-room frame dwelling; 5008 Victor St.; cost \$4000.

Tex., Dallas.—A. H. Burnes will erect 6-room brick-veneer residence 5534 Grand St.; cost \$3800.

Tex., Houston.—A. Cohen has plans by A. Delsile, 704½ Main St. for dwelling; 38x57 ft.; ordinary construction; shingle roof; cost \$4000; bids opened about Sept. 1. (Recently noted.)

Tex., Houston.—W. A. Shaefer will erect residence and garage on Austin St.; 7 rooms; cost \$3000.

Tex., Houston.—R. E. Moore, Richmond, Tex., is having plans prepared by Jones & Tablor for bungalow; 8 rooms; cost \$3000.

Tex., Houston.—Patrick S. Groggan of Magnolia Cotton Oil Co. has plans by C. H. Page & Bro. for residence Montrose; cherry-red brick and hollow tile; concrete porch front and one side; cost \$25,000.

Tex., Houston.—J. D. Langham has plans by C. C. McDonald for residence Montrose; 2 stories; 8 rooms; garage and servants' home in rear; cost \$8000.

Tex., Houston.—R. A. Bonds will erect 2-story 8-room residence W. Main St.; cost \$3800.

Tex., Houston.—W. A. Smith will erect residence; eight rooms; cost \$7000.

Tex., San Antonio.—W. T. Goode will erect dwelling on S. Flores St.; rock stone; cost \$4500.

Va., Norfolk.—R. M. Stokes will erect residence.

Va., Pardee.—Pardee Coal Co. will rebuild 7 dwellings, burned at loss of several thousand dollars.

Va., Richmond.—W. E. Roane will erect detached residence at 504 W. Clay St.; two stories; brick; cost \$3783.

Va., Richmond.—J. W. Lester will erect dwelling at 3228 Grove Ave.; 2 stories; cost \$5500.

Va., Roanoke.—Chas. J. Richardson will erect brick-cased dwelling Melrose Ave.; cost \$3000.

Va., Roanoke.—Turner Bros. will erect 4 dwellings on Third Ave.

### GOVERNMENT AND STATE

Ala., Birmingham.—Armory.—Battery D Armory Co., Major L. S. Dorrance, Commander of Artillery Battalion, has site 200x140 ft.; will erect armory; 2 stories; brick.

Ga., Cartersville.—Postoffice.—Treasury Department, O. Wenderoth, supv. archt., Washington, D. C., rejected bids to erect postoffice. (Lately noted.)

Ga., Cedartown.—Postoffice.—Treasury Department, O. Wenderoth, supv. archt., Washington, D. C., opened bids to erect postoffice; W. N. Keenan, Charlottesville, Va., lowest bidder at \$41,948 for limestone, and at \$42,648 for sandstone construction. (Lately noted.)

Ga., Dublin.—Postoffice.—Treasury Department, office O. Wenderoth, supervising architect, Washington, D. C.—Bids received until Sept. 25 for changes in exterior and lobby of United States postoffice, in accordance with plans and specifications, copies of which are obtainable from custodian at site or at this office at discretion of supervising architect.

Mo., Boonville.—Postoffice.—Treasury Department, O. Wenderoth, supv. archt., Washington, D. C., rejected bids to erect postoffice. (Previously noted.)

Mo., Jefferson City.—Jail.—State Prison Commissioners are having plans prepared by H. H. Hohenschild, Navarre Bldg., and Harry Clymer, both of St. Louis, for building to replace Centennial building; appropriation of \$350,000 available; to accommodate 600 convicts.

Mo., Jefferson City.—Capitol.—State Capitol Building Commission, E. W. Stephens, chrmn., Columbia, Mo., opens bids Nov. 6 (extended date) to erect State capitol above foundation, including plumbing, electrical work, heating plant; 426x290 ft.; dome 60 ft. in dia., 236 ft. high; 4 floors and basement, resting on 286 concrete pillars sunk to bed rock; Missouri limestone; cost about \$2,500,000; plans by Tracy & Swartwout, 244 Fifth Ave., New York. (Lately noted.)

Mo., Marshall.—Colony Bldg.—S. P. Houston, Pres. Board of Managers Missouri Colony for Feeble-Minded and Epileptic, opens bids Sept. 12 to erect cottages H and I, including heating, plumbing and ventilating; plans and specifications by J. H. Felt & Co., Kansas City, Mo., at office of architects and Board.

N. C., Fayetteville.—Home.—State Building Commission, Ashley Horne, member bldg. committee, opens bids Sept. 15 (extended date) to erect home for wives and widows of Confederate soldiers; 2 stories; 20 rooms; brick; slate roof; electric lighting; cost \$10,000; plans by Frank Simpson, Raleigh. (Lately noted.)

N. C., Monroe.—Postoffice.—Treasury Department, O. Wenderoth, supv. archt., Washington, D. C., rejected all bids to erect postoffice. (W. J. Brent Construction Co., Norfolk, Va., lately noted as lowest bidder.)

Tex., Clarksville.—Postoffice.—Treasury Department, O. Wenderoth, supv. archt., Washington, D. C., opened bids to erect postoffice, including plumbing, gasfitting, heating, etc.; John F. Johnson, Denton, Tex., is lowest bidder at \$45,275 for sandstone and Geo. A. Shaul, Seneca, Kan., at \$43,924 for limestone construction. (Lately noted.)

Va., Covington.—Postoffice.—Treasury Department, office O. Wenderoth, supervising architect, Washington, D. C.—Bids received until Oct. 8 to erect (including plumbing, gasfitting, heating apparatus, electric conduits and wiring, interior lighting fixtures and approaches) of United States postoffice; one story, basement and mezzanine; ground area 3800 sq. ft.; fireproof first floor; stone and brick facing; tin roof; drawings and specifications obtainable from custodian at site or at this office at discretion of supervising architect.

Va., Lynchburg.—Colony Bldg.—Virginia State Epileptic Colony, Dr. A. S. Priddy, Supt., began erecting dormitories and dining-room for 100 patients; ordinary construction; brick; Webster vapor heating; slate roof; cost, including heat and light, \$25,000; plans by Burnham & Cave; construction under supervision of Supt. (Previously noted.)

### HOTELS

Ala., Birmingham.—Mrs. Alice Peebles will erect hotel and store on Fourth Ave.; 3 stories; brick; cost \$20,000.

Ark., Van Buren.—J. A. Fookes of New York is reported as to erect hotel Jefferson and Main Sts.; fireproof; brick; 3 stories; cost \$30,000; W. V. Boatright and Tucker Butler are interested.

Mo., St. Louis.—Depuy Investment Co. is having plans prepared by Chas. H. Deferling, St. Louis, for hotel 20th and Market Sts.; 4 stories; colonial style; 45 rooms; 15 baths; cost \$45,000.

Tenn., Memphis.—Chickasaw Hotel Co. let contract Murray Iron Works for engines and boilers Hotel Chickasaw; cost \$30,000.

### MISCELLANEOUS

D. C., Langdon, Station K, Washington.—Home.—Gregg & Liesenring, architects, 1320 New York Ave. N. W., it is reported, receive bids until Sept. 5 to erect National Lutheran Home for Aged; 200x85 ft.; colonial style; red brick; stone trimmings; 3-story central building and two 2-story wings; 60 bedrooms, dining-room, library and chapel 40x35 ft.; elevator; cost \$70,000.

Fla., Fulford.—Clubhouse.—Community Club will erect clubhouse; native rock and concrete; structure to extend over water; roof garden; electric lighting.

Ky., Owensboro.—Sanitarium.—A. C. Foster will erect fireproof sanitarium.

Md., Hagerstown.—Stable.—McHenry Bros. will rebuild stable burned at loss of \$10,000.

Mo., St. Louis.—Swimming Pool.—Eugene Freund of Freund Bros. will erect swimming pool Cherokee St.; probably glass roof later; 175x75 ft.; sides and promenade of mosaic; hot and cold water; cost, excluding ground and equipment, \$28,000.

Mo., St. Louis.—Hospital.—B. Bernstein, Chrm. Bldg. Committee Jewish Kosher Hospital, it is reported, will have plans prepared for \$30,000 hospital.

N. C., Newbern.—Fair.—Eastern Carolina Fair Association will erect machinery hall on fair grounds; 50x100 ft.

S. C., Columbia.—Hospital.—Steady Hospital Co., incorporated by B. B. Steady, Francis M. Montgomery and W. S. Zimmerman.

Tenn., Chattanooga.—Motordrome.—Chattanooga Motordrome Co., capital stock \$5000, incorporated by A. W. Boyd, U. G. Caulk, Jesse M. List and others.

Tenn., Memphis.—Shed.—Memphis Terminal Corporation Co. will erect cotton shed Pennsylvania Ave.; cost \$7000.

Tex., Dallas.—Hospital.—Baptist Sanitarium will erect two-story concrete addition to hospital; cost \$14,000.

Tex., Galveston.—Stable.—Peter Gengler Co., 2065-67 Market St., will erect stable; contemplates erecting warehouse later.

Va., Richmond.—Stables.—Mrs. Pauline Thambler will erect stable. (See "Warehouses.")

W. Va., Wheeling.—Nunnery.—Carmelite Nuns, Caroline and Biddle Sts., Baltimore, Md., will erect convent Pleasant Valley near Wheeling; chapel in center, choir in rear, domestic offices, 21 cells; frontage 160 ft.; 2 wings, each 130 ft. deep. (Recently noted.)

## RAILWAY STATIONS, SHEDS, ETC.

Md., Baltimore.—Washington, Baltimore & Annapolis Electric Railroad Co., 108 N. Liberty St., will erect freight shed W. Pratt St.; 20x150 ft.; fireproof; steam heating; electric lighting; slag roof; bids opened Sept. 4; contractors estimating: West Construction Co., 15 E. Fayette St.; John Waters, 23 E. Center St.; Henry Smith & Sons, 111 S. Hanover St.; Cowan Building Co., 106 W. Madison St.; Milton C. Davis, 15 E. Fayette St.; Edw. Watters & Co., 509 N. Charles St., all of Baltimore; Engineering Construction Co.; plans by Otto G. Simonson, Maryland Casualty Tower Bldg., Baltimore. (Previously noted.)

Miss., Wesson.—Illinois Central R. R., A. S. Baldwin, Ch. Engr., Chicago, Ill., is having plans prepared to remodel depot.

N. C., Dunn.—Atlantic Coast Line Railway, E. B. Pleasants, Ch. Engr., Wilmington, N. C., and Durham & Southern Railway, J. E. Stagg, V.-P., Durham, N. C., will erect union station.

S. C., Spartanburg.—Southern Railway Co., B. Herman, Chief Engr., 1300 Pennsylvania Ave. N. W., Washington, D. C., will, it is reported, erect union passenger station; cost \$70,000.

S. C., Duncan.—Greenville, Anderson & Spartanburg Rwy., A. C. Lee, Ch. Engr., M. W. Greenville, has plans for railway station.

S. C., Taylor.—Greenville, Anderson & Spartanburg Rwy., A. C. Lee, Ch. Engr., M. W. Greenville, has plans for railway station.

Tex., Athens.—St. Louis Southwestern Railway, C. D. Pardon, Chief Engr., St. Louis, will erect depot.

Tex., Temple.—Temple, Northwestern & Gulf Railway, W. E. Dozier, Chief Engr., will erect passenger station.

Va., Richmond.—Richmond, Fredericksburg & Potomac Railroad, W. H. White, Prest., and Atlantic Coast Line Railroad, E. B. Pleasants, Ch. Engr., Wilmington, N. C., engaged John Russell Pope, 527 5th Ave., New York, to prepare plans for station; 5 stories; concourse in rear 290x65 ft.; 7 tracks with 20-ft. platforms 1000 ft. long; provision for additional tracks; entire main building to contain 1,536,000 cu. ft.; special baggage, mail and express building 50x200 ft.; limestone, iron and glass; rear of buff brick. Mr. Pope wires Manufacturers Record: Cost \$600,000; 250x100 ft.; waiting-rooms and offices; fireproof; limestone; classic Roman style. (Previously noted.)

## SCHOOLS

Ark., Pine Bluff.—St. Marion District Missionary Baptist Church, colored, will purchase site of five acres and establish co-educational school; accommodations for 500 students. S. L. Woolfolk is interested.

Fla., Hall City.—Dr. Geo. F. Hall, 10th floor Boyce Bldg., 32 Dearborn St., Chicago, will donate 160 acres adjoining Hall City and promote erection of Hall University, to include 39 buildings; cost \$1,500,000.

Fla., Tampa.—Special Tax School District No. 17 votes Sept. 2 on \$13,000 bonds for school. Address Hillsborough County Board of Public Instruction, Marshall Moore, Secty.

Fla., West Palm Beach.—Special School Tax District No. 1 voted \$55,000 bonds for schools. Address District School Trustees. (Lately noted.)

La., Amesville.—Jefferson Parish School Board, Gretna, opened bids to erect frame school building with slate roof; plans by Favrot & Lavaudais, New Orleans; Pollock & Killeen lowest bidders at \$8782, but bid in excess of amount available; probably after plans and arrange with Pollock & Killeen to erect. (Lately noted at Gretna.)

La., Hammond.—City is considering \$120,000 bond issue for school, etc. Address The Mayor.

La., Iowa.—School Board Calcasieu Parish receives bids addressed to F. M. Hamilton, Secty., Lake Charles, until Sept. 9 to erect brick schools at Iowa and Vincent,

La.; plans and specifications at office E. W. Phillips, architect, Lake Charles.

La., New Orleans.—City, Martin Behrman, Mayor, will erect school on St. Anthony St.

La., Vincent.—School Board Calcasieu Parish receives bids through F. M. Hamilton, Secty., Lake Charles, until Sept. 9 to erect school. (See La., Iowa.)

La., New Orleans.—New Orleans Land Co. will have plans prepared by A. E. Christy for school at Lakeview for use of city; cost about \$16,000.

Miss., Starkville.—Young Men's Christian Association of Agricultural and Mechanical College accepted plans by Overstreet & Spencer, Jackson, for association building; 100x50 ft., with 70x50-ft. addition; fireproof; cost \$60,000. (Previously noted.)

Okla., Brawley.—City selected Norman F. Marsh to prepare plans for school; cost \$50,000.

Okla., Chickasha.—State Board of Public Affairs, Oklahoma City, receives bids until Sept. 8 to erect dormitory at Industrial Institute and College for Girls; plans and specifications at office of board, Mercantile Bldg.; Layton & Smith, architects, Oklahoma City, and president of college, Chickasha.

Okla., Tulsa.—R. E. Curran, County Clerk, opens bids Sept. 2 to erect 4-room school for colored pupils; plans and specifications at office Geo. Winkler, architect, and office of County Clerk; certified check \$300.

S. C., Anderson.—J. A. Brock, Chrm. Trustees, receives bids until Sept. 16 to erect \$7000 and \$10,000 buildings after plans by Sayre & Baldwin; bids opened Sept. 2 to erect \$16,000 and \$4500 schools after plans by J. H. Casey. (Previously noted.)

S. C., Dumbarton.—Trustees, B. F. Anderson, Secty., receive bids until Sept. 10 to erect building; plans at offices of Mr. Anderson and G. Lloyd Preacher, architect, Augusta, Ga.; contractors secure plans on deposit of \$10 with architect.

Tenn., Greenville.—Greenville College Trustees will erect brick school building.

Tex., Centerville.—J. H. Seale will expend \$8000 to erect public school; 66x77 ft.; 2 stories; ordinary construction; brick; asbestos composition roof; plans by Dennis R. Walsh, Littlefield Bldg., Austin. (Recently noted to open bids Sept. 8.)

Tex., Denton.—College of Industrial Arts will erect greenhouse, laboratory, lecture room, office, plant-propagation room, etc.

Tex., Genoa.—School Board, Genoa School District, receives bids, addressed to L. L. Pugh, County School Supt., until Sept. 13 to erect reinforced concrete, brick and hollow-tile school; plans and specifications at office of Lane & Dowdy, Paul Bldg., Houston.

Va., Bristol.—City will vote on bonds for high school; cost about \$50,000. Address The Mayor.

Va., Franklin.—Holy Neck District School Board, J. R. Holland, Chrm., Holland, Va., receives bids until Sept. 6 to erect school; plans and specifications office of Lee Britt, Suffolk, Va., Supt., and residence of Mr. Holland.

Va., Richmond.—City has plans by Carneal & Johnston for Springfield school; cost \$30,000.

Va., Richmond.—Richmond College will erect central heating and lighting plant for electric lines, water mains, sewerage system to cost \$140,000; will provide 10-in. water main to cost about \$30,000; city water supply; also contemplates biological, chemical and physical laboratories, gymnasium, \$30,000 chapel to seat 1500.

W. Va., Homewood (not a postoffice).—John Kaden, Secty. Board of Education, Courthouse District, Roanoke, W. Va., will receive bids until Sept. 6 to erect school; plans and specifications at Sheriff's office.

W. Va., Summersville.—J. M. Wiseman, Prest. Board of Education of Wilderness District, opens bids Sept. 10 at residence of Dolly Beams to erect 1 school, repair 5 and roof 1; specifications furnished on grounds.

## STORES

Ala., Birmingham.—Mrs. Alice Peebles will erect store and hotel on Fourth Ave.; 3 stories; brick; cost \$20,000.

Ala., Mobile.—Ogburn-Griffin Wholesale Grocery Co. will erect store at St. Joseph and Bloodgood Sts.; steel and concrete; cost \$25,000.

Ark., Little Rock.—Brooks Bros. will erect store at 2101 Gaines St.; 2 stories; brick veneer; cost \$9500.

Ark., Mount Ida.—Scott & Brakesfield and Radford & Waycaster will erect business block; 2 stories; brick.

Fla., Fort Myers.—H. E. Heitman opens bids Sept. 8 to erect building; 8 stores on 1st floor; 32 offices on 2d floor; 80x200 ft.; gravel roof; cost \$50,000; plans by F. J. Kennard, Tampa, Fla. (Recently noted.)

Fla., Jacksonville.—A. Ritzwoller will erect 2-story brick building De Forest St. and Riverside Ave.; cost \$11,600.

Fla., New Smyrna.—D. B. Paxton will erect business block; Georgia pressed brick.

Fla., Pensacola.—E. W. Lawrence has plans by W. C. Frederick for store building; 66½x100 ft.; ordinary construction; tar and gravel roof; cost \$3000. (Recently noted.)

Ga., Atlanta.—J. B. Thompson will erect store Fairlie St.; 3 stories; brick; cost \$7500; day labor.

Ga., Columbus.—Ascher Solomon has plans for store and apartment-house. (See "Apartment-houses.")

Ky., Pineville.—Dr. J. G. Foley contemplates erecting store Virginia Ave.

Ky., Pineville.—William Jones will erect store Virginia Ave.; 2 stories; brick.

La., Independence.—Adam Kluchin opens bids about Sept. 10 to erect store, office and lodge building; 47x100 ft.; fireproof; electric lighting; composition roof; plans by Nolan & Torre, 415 Hennen Bldg., New Orleans. (Recently noted.)

La., Saline.—L. P. Fry will erect store; brick; 40x120 ft.

Miss., Tutwiler.—Dr. W. H. Harrison will erect building to replace burned structure; 2 stories; brick; cost \$10,000. (Previously noted burned.)

Miss., Tutwiler.—J. O. Clay has plans by M. M. Alsop, Houston, Miss., for building; 2 stories; brick; cost \$10,000.

Mo., St. Louis.—F. L. Dittmeier will erect store and apartment-house at 4201-03 Gano St.; cost \$5000.

N. C., Asheville.—Elks Home Co., F. R. Hewitt, Prest., invites architects to submit competitive plans for store and lodge building. (See "Association and Fraternal Buildings.")

N. C., Colerain.—W. H. Beasley will erect brick store.

Okla., Yale.—Yale Wholesale Grocer Co. opens bids at once to erect building; 50x120 ft., with basement; fireproof; elevator; rubberoid roofing; cost \$6000. (Lately noted.)

S. C., Columbia.—Lorick & Lowrance receive bids Sept. 10 to erect store; 3 stories and basement; 50x180 ft.; mill construction; plans by Geo. E. Lafaye. (Previously noted.)

S. C., Columbia.—Frank Semmes has plans by Geo. E. Lafaye for store and apartment building; 2 stories and basement; 40x65 ft.; day labor.

S. C., Florence.—S. H. Kress & Co., 296 Broadway, New York, will erect store building; cost \$30,000.

Tenn., Nashville.—Tibbs-Hanley Furniture Co., 801 1st St., has plans by C. K. Colley, Life & Casualty Bldg., for furniture showrooms; 40x50 ft.; ordinary construction; cost \$3500; bids opened Aug. 27.

Tex., Dallas.—A. I. Jones will erect 1-story brick building 412 N. Akard St.; cost \$5000.

Tex., Fort Worth.—Miles Sweeney will erect building at Alston and Judith Sts.; 2 stories; brick; cost \$5000.

Tex., Houston.—Isadore Goringor will erect store and apartment-house; cost \$3000.

Tex., Whitehouse.—Dr. C. H. Whittingham is having plans prepared for business building; 72x70 ft.; brick; cost \$3500.

W. Va., Charleston.—Frankenberger estate has plans by Weber, Werner & Adkins, Cincinnati, for store, loft and office building; 11 stories; brick; steel, terra-cotta and hollow tile; cost \$100,000. (Frankenberger

Bros. previously noted to erect 4-story building.)

W. Va., Wheeling.—H. Swierkose is having plans prepared by G. H. Dieringer for store and apartment building on S. Jacob St.; 2 stories.

## THEATERS

Ga., Rome.—Edward Peters will erect theater on site of Lyric Theater; 3 stories; cost \$10,000.

Mo., St. Louis.—John Cafferara and associates have plans for theater Delmar Ave.; reinforced concrete and brick; fireproof; exterior of white terra-cotta; marquise; marble wainscoting in lobby and plaster supporting ornamental cornice and coppered ceiling; auditorium and mezzanine floor to seat 2000.

## WAREHOUSES

Ala., Birmingham.—W. I. Grubb will erect warehouse to be occupied by National Biscuit Co.; pressed brick; 65x130 ft.; cost \$25,000.

La., New Orleans.—Board of Port Commissioners enacted ordinance providing issuance of \$3,000,000 bonds to erect 6 warehouses; 8 stories; to be equipped with cotton-handling machinery; railroad yard and tracks, etc.; Samuel Young, Engr., 200 New Orleans Court Bldg. (Lately noted.)

Md., Baltimore.—Neudecker Tobacco Co. will erect warehouse 47x135 ft.; 4 stories; probably fireproof; steam heat; electric lighting; electric elevator; slag roof; day labor. (Recently noted.)

Mo., St. Louis.—American Manufacturing Co. will erect warehouse at 800-12 Barry St.; 3 stories; cost \$24,000.

Mo., St. Louis.—Edward Schweltz will erect 1-story warehouse 1901-03 Chouteau St.; cost \$3000.

N. C., Statesville.—Iredell Warehouse Co., W. B. Gibson, Prest., contemplates erecting additional fertilizer warehouse.

N. C., Wilmington.—C. C. Covington & Co. will erect warehouse.

N. C., Wilmington.—James I. Metts & Son and Worth Co. will erect joint warehouse; 100x200 ft.; corrugated iron; bids opened within few days.

S. C., Columbia.—Kirkland Distributing Co. receives bids Sept. 9 to erect warehouse; 75x80 ft.; 2 stories and basement; mill construction; plans by Geo. E. Lafaye.

S. C., Greenville.—Greenville, Anderson & Spartanburg Rwy. (Fiedmont & Northern Lines) A. C. Lee, Engr., M. W. has plans and will award contract in about week to erect 5 warehouses on McBee Ave. (Lately noted.)

S. C., Union.—Chamber of Commerce, S. M. Rice, chairman committee, is promoting erection of cotton warehouse.

S. C., Sumter.—Davis D. Moise, Prest. Chamber of Commerce, appointed J. H. Chandler and W. G. Moses chairmen of committees to raise \$15,000 for tobacco warehouse. (Lately noted.)

Tex., Fredericksburg.—Schneider & Riler will erect warehouse.

Tex., Galveston.—Peter Gengler Co. contemplates erecting warehouse. (See "Miscellaneous.")

Tex., Houston.—H. House will erect warehouse Nance St.; 1 story; frame; 200x15 ft.; cost \$10,000; will be occupied by Armistead & Oliver.

Va., Richmond.—Mrs. Pauline Thalheimer will erect warehouse and stable on Walnut St.; 3 stories; cost \$12,000.

W. Va., Charleston.—Charleston Milling & Produce Co. will rebuild warehouse reported burned; probably reinforced concrete and fireproof; plans not fully determined.

## BUILDING CONTRACTS AWARDED

### APARTMENT-HOUSES

Mo., St. Louis.—Mrs. Ostermann let contract F. L. Dittmeier, St. Louis, to erect flat; 4 and 5 rooms; tiled bathrooms; granite cellar; cut stone, brick and tile porches.

Tenn., Memphis.—Mrs. S. S. Asher awarded contract J. A. Foricher to erect apartment-house and store at Union and Marshall Aves.; concrete and brick; cost \$12,200.

Tex., El Paso.—Geo. W. Morrow has plans by and awarded contract William Rheinheimer, 405 S. Florence St., to erect tenement-house; 48x39 ft.; brick; electric wiring; asbestos roof; cost \$4700; contract for masonry awarded Seddon & Ball, 1927 Arizona St.; material supplied. (Mr. Rheinheimer recently noted to erect building.)

Tex., Houston.—E. G. Prince let contract J. J. Green to erect apartment-house; 61 ft. 6 in. by 37 ft. 10 in.; 6 apartments; mill construction; gas heat; electric lighting; composition roof; cost \$12,000; plans by C. C. McDonald, First National Bank Bldg.; previously noted. (See "Machinery Wanted.")

W. Va., Wheeling.—Mrs. Louise Lono let contract Andrew Hart to erect apartment-house 260 Jacob St.; 4 stories; plans by G. H. Dieringer.

### ASSOCIATION AND FRATERNAL

Ala., Montgomery.—Masonic Home of Alabama let contract to erect 2 cottages.

### BANK AND OFFICE

D. C., Washington.—H. M. Crandall of Feature Film Co., 405 11th St. N. W., let con-



tract to erect theater and office building. (See "Theaters.")

Fla., Fort Myers.—First National Bank let contract at about \$15,000 to Franz Safe & Lock Co., 27 S. Hogan St., Jacksonville, for safes, vaults, deposit boxes, etc. (Other contracts recently noted.)

Fla., Gainesville.—Phifer State Bank, W. R. Phifer, Pres., will alter Phifer Bldg. for bank; install vault, fixtures, etc., to cost about \$16,000; contracts let.

Fla., New Smyrna.—John McCormick let contract to erect store and office building. (See "Stores.")

Fla., Lakeland.—J. F. Townsend & Co., 14 Futch & Gentry Bldg., have contract to erect Futch building for offices and stores. (See "Stores.")

Ga., Albany.—B. B. Williams has plans by and let contract Geo. W. Muller Bank Fixture Co., Atlanta, to remodel bank; fireproof; cost \$4,000.

Tenn., Memphis.—Bank of Commerce & Trust Co. let contract at \$20,000 to F. E. Newberger for heating plant.

### CHURCHES

Ark., Fayetteville.—First Christian Church awarded contract at \$16,000 L. A. Robinson, Rogers, Ark., to rebuild burned church.

Miss., Tutwiler.—Methodist Church let contract Clarksdale Mfg. Co., Clarksdale, Miss., to erect building; frame; metal shingle roof; cost \$3550; plans by M. M. Alsop, Houston, Miss. (Previously noted.)

Va., Richmond.—Fairmount Avenue Methodist Church let contract Charles W. Pollard to erect building; seating capacity 100; cost \$20,000.

### CITY AND COUNTY

Ark., Hot Springs.—Fire Station.—Board of Awards awarded contract J. D. Brock to erect fire station; cost about \$3000.

Ark., Thornton.—Jail.—City Council awarded contract R. B. Webb, Pine Bluff, to erect jail; brick; concrete floor and roof.

Ky., McKee.—Jail.—Jackson county has plans by and awarded contract Pauly Jail Building Co., St. Louis, to erect jail; 23x39 ft.; steam heat; cost \$13,000. (Previously noted.)

### COURTHOUSES

N. C., Goldsboro.—Wayne county awarded contract W. P. Rose to erect courthouse; cost \$100,000; plans by Milburn, Helster & Co., Union Savings Bank Bldg., Washington, D. C. (Lately noted.)

### DWELLINGS

Ala., Alabama City.—Col. R. B. Kyle, Gadsden, awarded contract T. H. Harris to erect 7 dwellings.

Ala., Birmingham.—R. G. McCarty let contract Cooper & Holmes to erect dwelling; 10 rooms; fireproof; furnace; electric lighting; slate roof; cost \$8500; plans by W. L. Welton. (Recently noted.)

Ala., Birmingham.—J. A. Martin awarded contract Tharp & Son to erect dwelling; 7 rooms; ordinary construction; cost \$4000; plans by Miller & Martin. (Recently noted.)

Ala., Edgewater (not postoffice).—Tennessee Coal, Iron & Railroad Co., Geo. C. Crawford, Pres., Birmingham, let contract Crowell Bros. Lumber Co., Bessemer, to erect 15 five-room, 10 two-room and 75 one-room dwellings for employees; cost \$45,000. (Lately noted.)

Ark., Tuckerman.—A. J. Goetz awarded contract A. R. Anderson to erect \$3000 residence.

Fla., Jacksonville.—J. J. Ahern let contract J. C. Halsema to erect two-story brick residence; cost \$10,000.

Fla., Lakeland.—G. W. Williams let contract Marshall & Sanders to erect \$4000 Swiss chalet near Lake Hollingsworth.

Ga., Atlanta.—A. R. Dyer awarded contract C. Shelverton to erect dwelling at 35 Cascade Ave.; 1 story; frame; cost \$3250.

La., Donaldsonville.—A. J. Melancon has plans by and let contract (in June) W. C. Hazlip to erect dwelling; 3x40 ft.; 1½ stories; metal-shingle roof; cost \$3000. (Recently noted.)

Md., Baltimore.—Henry Rapp, 2914 E. Baltimore St., let contract George Koyer, 1510 Latrobe Park Ter., to erect several dwellings; 13x76 ft.; brick; mill construction; hot-water heat; gas and electric lighting; tin roof; cost \$1200 each; plans by J. Edward Lafferty, 11 E. Pleasant St.

Md., Little Louna (not a postoffice).—Wm. N. Bryant let contract Willard E. Harn Co.,

213 N. Calvert St., Baltimore, to erect residence; 2½ stories; frame and stucco.

Miss., Tutwiler.—F. R. Mays let contract Geo. W. Edwards to erect 2 bungalows; cost \$4000.

N. C., Raleigh.—J. W. Weaver will erect residence on Boylan St.; 8 rooms; frame; 2 stories; mill construction; slate roof; cost \$3500; plans by J. M. Kennedy; contract let W. H. Nordan.

Tenn., Jackson.—Wm. Holland let contract Tatum Bros. to erect dwelling; 8 rooms; brick veneer; hot-air heat; shingle roof; cost \$7500; plans by R. A. Heavener; subcontract let E. B. Curtis for plumbing and heating. (Recently noted.)

Tenn., Memphis.—J. M. Dean let contract J. B. Moody to erect 3 frame dwellings, 910-916-920 Saxon Ave.; cost \$3000.

Tenn., Memphis.—Mrs. Edw. Sewers let contract William Burrows to erect 10-room brick addition 208 Gayoso Ave.; cost \$5000.

Tenn., Memphis.—Lamar Heiskell let contract J. C. Jones to erect residence Parkway and Carnes Ave.; cost \$20,000.

Tenn., Memphis.—Miss Margaret Byrnes let contract to Palmer Bros. to erect frame dwelling 1172 Overton Ave.; cost \$3000.

Tenn., Pruden.—Pruden Coal & Coke Co., general offices, Knoxville, let contract W. E. Kidwell & Sons, Jellico, to erect 75 to 100 houses for miners.

Tex., Bishop.—F. Z. Bishop let contract Emery Ferrell to erect 72 buildings; 24 four-room dwellings, 24 two-room houses, 24 barns, one of each on each quarter section of 160 acres of land. (Lately noted.)

Tex., Cuero.—F. W. Jaeggli let contract Shropshire & Troutwein to erect bungalow; 1 story; 40x60 ft.; shingle roof; cost \$4000; plans by Dickerson & Whippey. (Recently noted.)

Tex., El Paso.—H. S. Beach, 716 Myrtle Ave., awarded contract Geo. Beaudett, 823 Roosevelt St., to erect residence and garage; former 34x50x35 ft.; latter 18x24 ft.; brick and stucco; electric lighting; hot-water heat; cost \$9000; plans by The Craftsman, New York; contract for heating and plumbing awarded C. W. Fraser at \$1400. (Mr. Beaudett recently noted to erect dwelling.)

Va., Orange.—Dr. R. Marvin Harris let contract John W. Reynolds to erect residence; two stories; brick; 36x36 ft.; 11 rooms; cost \$5500.

W. Va., Clark Town (not a postoffice).—A. Catzen awarded contract S. A. Wiggins, Northfork, W. Va., to erect brick dwelling; cost \$15,000.

### GOVERNMENT AND STATE

Ala., Birmingham.—Fair.—Alabama State Fair awarded contract to erect building; Jack Biddle and A. C. Chesney, Comm.

Mo., Mt. Vernon.—Hospital.—Managers State Sanatorium for Tuberculosis let contract A. T. Bramer & Sons to erect infirmary building; 2 stories; brick; plans by H. H. Hohenschild, 310-11-12 Navarre Bldg., St. Louis. (Lately noted.)

Mo., Rolla.—Postoffice.—Treasury Department, Oscar Wenderoth, Supr. Archt., Washington, D. C., awarded contract at \$45,000 to Robert McGraw to erect postoffice. (Previously noted.)

Okla., Ardmore.—Home.—Trustees State Confederate Home let contract W. F. Herberm, Muskogee, to erect annex to home, and to Kennerly, Spragins & Lewis, Ardmore, for plumbing and heating; cost \$15,023. (Lately noted.)

Okla., Chickasha.—Postoffice.—Treasury Department, O. Wenderoth, Supr. Archt., Washington, D. C., let contract at \$121,722 to W. Yeager, Danville, Ill., to erect postoffice. (Lately noted.)

Tex., Marshall.—Postoffice.—Treasury Department, O. Wenderoth, Supr. Archt., Washington, D. C., let contract at \$58,926 to Geo. A. Shaul, Seneca, Kan., to erect postoffice; one story and basement; stone and brick facing. (Lately noted.)

W. Va., Sistersville.—Postoffice.—Treasury Department, Oscar Wenderoth, Supr. Archt., Washington, D. C., awarded contract at \$62,760 to Westchester Engineering Co., 103 Park Ave., New York, to erect postoffice. (Lately noted as lowest bidder.)

### HOTELS

Tex., Cameron.—J. T. Westmoreland has contract to erect two-story hotel; frame; cost \$2000.

Tex., Cooper.—Garrard Hotel Co. let contract to erect hotel; 90x40 ft.; ordinary construction; electric lighting; gravel roof; cost \$14,000; plans by J. G. Shelton. (Company recently noted incorporated.)

Tex., Denison.—P. McDaniel let contract J. M. Beck to erect 3-story brick addition and third story on frame building, increasing capacity of McDaniel Hotel from 20 to 50 rooms; cost \$10,000.

Tex., Dennison.—P. McDaniel of McDaniel Hotel awarded contract J. M. Beck to erect 3-story brick addition and third story to building; steam heat; cost \$10,000.

Tex., Hamiltonburg.—Chas. R. Tips, mgr. Hamilton Townsite Co., let contract to erect hotel; two stories; 18 rooms.

Va., Richmond.—Joseph Rosenberg awarded contract to Haynes Bros., Chatham, Va., to erect 50-room hotel; cost \$50,000.

### MISCELLANEOUS

Ky., Lexington.—Nurses' Home.—Good Samaritan Hospital awarded contract Congleton Lumber Co. to erect nurses' home; 36x72 ft.; 4 stories; brick; mill construction; slate roof; cost \$20,000; plans by Richards, McCarthy & Bulford, Columbus, O. (Recently noted.)

Mo., Cape Girardeau.—Hospital.—W. M. Sutherland Building & Contracting Co., St. Louis, has contract to erect hospital.

### RAILWAY STATIONS, SHEDS, ETC.

N. C., Raleigh.—Seaboard Air Line Railway Co., W. D. Faucette, Chief Engr., Portsmouth, Va., awarded contract A. M. Walkup, Richmond, to erect warehouse; 1 story; 80x110 ft.; brick; mill construction; electric wiring; composition flexible cement roofing; cost \$13,000. (Lately noted.)

### SCHOOLS

Ala., Demopolis.—City let contract at \$22,196 to Neely & Clancy to erect school; fireproof; steam heat; electric lights; plans by Frank Lockwood, Montgomery. (Recently noted voting \$20,000 bond issue.)

Ala., East Lake, Station, Birmingham.—Howard College, Jas. M. Shelburne, Pres., awarded contract to erect \$15,000 gymnasium building previously noted; also awarded contract for improvements to present buildings; cost \$5000. (Recently reported.)

Ark., Rondo.—City awarded contract Jos. E. Fry, Helena, Ark., to prepare plans for school; 56x64; ordinary construction; New Century metal shingle roof; cost \$7000; bids opened Sept. 3.

Ky., Lexington.—Central Christian Church has plans by and awarded contract Smith & Bedford, E. Main St., to erect educational building; 80x50 ft.; 3 stories; cost \$17,050. (Recently noted.)

Md., Baltimore.—Board of Awards awarded contract at \$3651 to George W. Walther & Co., 208 W. Fayette St., for electrical fixtures for Polytechnic Institute.

Md., Catonsville.—St. Charles' College awarded contract Jas. J. O'Connor, 427 E. Lexington St., Balto., to erect chapel; steam heat; electric lights; slate roof; plans by Ellicott & Eumart, 1102 Union Trust Bldg., Balto. (Contract for other buildings lately noted.)

Miss., Indianola.—City awarded contract Goodner & White, 2318 Avenue E, Ensley, Ala., to erect school; 87x64 ft.; 2 stories and basement; brick; ordinary construction; Barrett's pitch and gravel roofing; plans by Ben Price, 518 Empire Bldg., Birmingham; contracts let Peck-Williamson Co. for heating, and Ludbach Plumbing Co. for plumbing and wiring; both of Jackson, Miss. (Recently noted.)

N. C., Chapel Hill.—University of North Carolina awarded contract W. B. Barrow, Raleigh, to erect dining hall. (Previously noted to cost \$40,000.)

S. C., Gaffney.—Trustees awarded contract Lawrence Electric Co. for sewerage in 2 school buildings, and Builders' Supply Co. for woodwork; will erect addition to each school and enlarge auditoriums; R. M. Irvin, Supt.

Tenn., Huntington.—City let contract at \$6250 to Slayden & McNabb, Waverly, Tenn., to erect boys' dormitory for Industrial and Training School; three stories; concrete; steam heat.

Tex., Goliad.—City let contract W. L. Clark, Port Lavaca, Tex., to repair high school.

Tex., Houston.—Ross Republic Marble Co., Knoxville, Tenn., has \$50,000 contract to supply marble for laboratory building William M. Rice Institute; general contract let at \$285,903 to James Stewart & Co., St. Louis; plans by Cram, Goodhue & Ferguson, Houston, Boston and New York. (Lately noted.)

Va., Falmouth.—Falmouth School District

let contract Richard Oliver and Arthur Henderson to erect graded school at White Oak.

### STORES

Ala., Birmingham.—R. D. Burnett Cigar Co. advises Manufacturers Record improvements to Burnett store in Brown-Marx Bldg. embrace installation soda fountain; cost \$3500; contract let. (Recently noted.)

D. C., Washington.—James Parsons, 616 Union Trust Bldg., is reported to have contract to erect building 13th and F Sts.; owner's name withheld.

Fla., Jacksonville.—Buck & Levy let contract Mr. Woodward to erect store State St.; cost \$10,000; plans by Talley, Summer & Hamilton.

Fla., Lakeland.—J. F. Townsend & Co., 14 Futch & Gentry Bldg., have contract to erect Futch building for store and offices; plate-glass front; marble and limestone trimmings; tile floors; face brick exterior.

Fla., New Smyrna.—John McCormick let contract to erect building; lower floor for stores; upper floor for offices; 25x60 ft.

Ga., Atlanta.—L. Z. Rosser and J. H. Porter awarded contract Gude & Co. to remodel structure for stores and lofts; 6 stories; 9000 sq. ft. floor space; sprinkler system; electric lighting; tar and gravel roof; cost of elevator \$7500; plans by A. Ten Eyck Brown, Forsythe Bldg. (Recently noted under "Bank and Office Buildings.")

Tenn., Memphis.—Mrs. S. S. Asher awarded contract J. A. Forcher to erect store and apartment-house. (See "Apartment-houses.")

Tex., Dallas.—L. Blaylock awarded contract to erect store building 1214-16 Elm St.; 3 stories and basement; cost \$50,000; will be occupied by O. L. Daniel and others. (Lately noted.)

Tex., Fort Worth.—A. J. Sandegard awarded contract E. F. Moore to erect store; 75x100 ft.; 3 stories; cost \$40,000.

W. Va., Clark Town (not a postoffice).—L. C. Austin & Co. let contract S. A. Wiggins, Northfork, W. Va., to erect business building; cost \$7000.

W. Va., Clark Town (not a postoffice).—R. J. Staton let contract S. A. Wiggins, Northfork, W. Va., to erect brick business building; cost \$5000.

### THEATERS

D. C., Washington.—Florida Amusement Co. let contract John H. Nolan, 1413 G St. N. W., to erect moving-picture theater 1438 Florida Ave. N. E.; brick; cost \$10,000.

D. C., Washington.—H. M. Crandall of Feature Film Co., 405 11th St. N. W., let contract D. E. Nichol, 210 N. Capitol St., to erect moving-picture theater 9th and E Sts. N. W.; 75x50 ft.; lobby finished in mosaic flooring; dormer windows and gables; three stories; upper floors for offices; cost \$25,000; plans by W. S. Pinger, 424 Georgia Ave. N. W.

Fla., Jacksonville.—Central Investment Co. let contract to erect theater and remodel stores on Adams St., to be leased to Montgomery Amusement Co.; 65x105 ft.; seating capacity, 1200; cost \$25,000 to \$30,000. (Lately noted.)

Va., Norton.—J. Cohen let contract to erect theater Park Ave.; brick.

### WAREHOUSES

Ark., Harrison.—H. A. Crandall will expend \$10,000 to erect warehouse for Ozark Grocer Co., Fayetteville, Ark.; 90x115 ft.; electric lighting; hand-power elevator. (Contract previously noted awarded.)

Ky., Eminence.—Eminence Distillery Co., 104 W. Main St., Louisville, let contract Tobe Greiner, 1001 E. Broadway, Louisville, to erect warehouse; 112x100 ft.; 6 stories; ordinary construction; brick; composition roof; cost \$20,000; heating and elevator in contract. (Recently noted.)

Mo., St. Louis.—S. Leschen & Sons Rope Co. will erect warehouse at Hamilton and Kennerly Aves.; 3 stories; fireproof; 90x166 ft.; reinforced concrete; tile roof; steel sash; air heaters; cost \$75,000; plans by Guy C. Mariner; James Stewart & Co., contractors. (Lately noted.)

Tex., Dallas.—Boren-Stewart Co. awarded contract Davis & Davis, Lamar and Hord Sts., to erect building; 100x170 ft.; 3 stories and basement; fireproof; electric elevator; composition roof; cost \$100,000; plans by Lang & Witcheil. (Lately noted.)

Tex., Fredericksburg.—Max Stieffel and J. Wolff, San Antonio, Tex., let contract to

erect warehouse; 60x80 ft.; fireproof; freight elevator; composition roof; cost \$17,000; plans by Ernest P. Behles, 228 W. Commerce St., San Antonio, Tex. (J. Oppenheimer & Co., San Antonio, Tex., previously noted to erect building.)

Va., Norfolk.—Talbot Bros. let contract Jesse Johnson to erect addition 101-103 Main St.; 6 stories; semi-fireproof; also remodel present structure; occupied by Old Dominion Paper Co.; cost \$56,000; plans by John Kevan Peebles. (Recently noted.)

## RAILROAD CONSTRUCTION

### RAILWAYS

Ala., Bridgeport.—The Pierce Development Co. is building an 8-mile extension of its narrow-gauge railroad. Dr. F. D. Pierce, Bridgeport, is Pres.

Ark., Fort Smith.—M. C. Burke of Fort Smith, pres. Fort Smith, Arkoma & Wilburton Railway Co., has proposed to the Business Men's Club that the city provide 10 miles right of way from Arkoma and depot facilities besides stock subscriptions to make the total \$150,000. Proposed line is Fort Smith to Wilburton, Okla., 62 miles.

Ark., Heber Springs.—Missouri & North Arkansas Railroad Co. is quoted saying not less than \$25,000 will be spent for improvements at Heber Springs, including considerable new track. E. M. Wise, Eureka Springs, Ark., is Gen. Mgr.

Ark., Little Rock.—Ordinance granting franchise to Pine Bluff & Eastern Traction Co. for proposed line, Little Rock to Pine Bluff, is vetoed by the Mayor.

Ark., Murfreesboro.—C. W. Dodson of Nashville, Ark., Gen. Supt. Memphis, Dallas & Gulf Railroad, is quoted saying about 80 per cent. of grading is done between Glenwood and Hot Springs on extension of 65 miles Murfreesboro to Hot Springs; also that much preliminary work and grading is finished between Glenwood and Murfreesboro. Tracklaying to begin Sept. 15. A steel bridge 600 ft. long will be erected over the Ouachita River and one 200 ft. over the Antoine River.

Fla., Arcadia.—Dr. George F. Hall, 10th floor Boyce Bldg., 23-34 S. Dearborn St., Chicago, Ill., also Hall City, Fla., says he is ready to co-operate with any reputable railroad company or promoter for construction of a line through Hall City, this with reference to recent report he contemplated construction.

Fla., Pensacola.—Capital Construction Co. is reported recently formed in Chicago and to have secured franchise granted to W. P. Dickinson of that city for Memphis & Pensacola Railroad, and will resume grading immediately to save franchise, contract being let. John Clancy of Chicago is elected president of the road. McKeith & Miller of Meridian, Miss., are attorneys. J. H. Sullivan of Memphis, Tenn.; Byron H. Joy, S. W. Jones, Delevor B. Cole and A. A. Rolf, all of Chicago, also reported interested. Capital to be increased from \$1,000,000 to \$15,000,000.

Ga., Americus.—Central of Georgia Railway reported given franchise to extend tracks along Hampton St. C. K. Lawrence, Savannah, is chf. engr.

Ga., Atlanta.—Grading reported begun for the lead tracts in the new industrial section at Walker, Mangum and Haynes Sts.; track-laying to begin in 60 days. Southern Railway and Atlanta, Birmingham & Atlantic Railroad interested. G. H. Dugan is asst. engr. for the Southern and L. L. Beall is chf. engr. for the A. B. & A., both in Atlanta.

Ga., Augusta.—James U. Jackson, Pres. Carolina & Georgia Railway Co., is quoted saying that Michael P. McGrath, contractor to build the proposed electric line from Columbia, S. C., to Augusta, will arrive soon, and it will be decided whether it will be constructed via Eureka or via Trenton and Johnston, S. C., about 80 miles. G. E. Shand, Columbia, S. C., is Chf. Engr.

Ga., Macon.—R. L. Williams, Jr., says that plan for the proposed railroad from Columbus to Augusta is in rather indefinite shape. It would not pass through Macon, but would go from Columbus to Augusta via Talbotton, Thomaston, Forsyth, Juliette, Hillsboro or Monticello, Eatonton, and thence through either Camak or Union Point, Washington and Appling to Augusta.

Ky., Beaver Creek.—The Baltimore & Ohio Railroad Co., which proposes to build a coal line from a connection with the Chesapeake & Ohio Railway up the left bank of Beaver Creek, about 25 miles, denies a recent report that it would build from Beaver to a connection with its system at or in the vicinity of Kenova, W. Va., about 100 miles. F. L. Stuart, Baltimore, Md., is chf. engr.

Ky., Lexington.—Louisville & Nashville Railroad reported will build double-tracked connection between main line at Bryan's

Station and the Lexington & Eastern division, and also double track main line Lexington to Bryan's. John Howe Peyton, Louisville, is chf. engr. of construction.

Ky., Whitesburg.—Louisville & Nashville Railroad, it is reported, will build 3-mile spur up Potters Fork to mines of Mineral Fuel Co. John Howe Peyton, Louisville, is chf. engr. of construction.

La., New Iberia.—W. S. Henning, Chf. Engr. Southwestern Traction Co., says line will be 76 miles, Berwick to Lafayette, La., via Franklin, Jeanerette, New Iberia and St. Martinsville. No large bridges; one over Bayou Vermillion will be 100 ft. long. Not decided when more bids for construction will be invited. Jules Godchaux is Pres.; Sol Wexler, V.-P.; Lawrence Blum, Secy and Treas., and F. W. Crosby, Gen. Mgr.

Md., Chesapeake Beach.—The North Beach Railway Co. has applied to the Public Service Commission to issue \$15,000 of common stock, and is quoted saying construction is proceeding from Chesapeake Beach to North Beach, 3 miles.

Mo., Kansas City.—Kansas City Connecting Railway Co. is reported organized and will extend stock yards tracks, also making other improvements. The Kansas City Stockyards Co. is behind the enterprise. It denies press report that \$1,500,000 would be spent, saying it is overdrawn.

Mo., Mexico.—Mexico Investment & Construction Co., capital \$60,000, is chartered to take over property and franchises of Mexico, Perry & Santa Fe Railway Co., an electric line; more construction expected. Incorporators, W. W. Munday and J. P. Cauthorn of Moline, Mo.; J. D. Bates and J. A. Botts of Santa Fe, Mo.; W. W. Botts and T. C. Botts of Mexico, Mo., and Marshal Rust of Pilot Grove, Mo.

N. C., Shelby.—A 9-mile extension of the Lawndale Railroad from Lawndale to Caesar, N. C., is reported under consideration. Maj. H. F. Schenck is Pres.

Okla., Henryetta.—Henryetta Interurban Railroad Co., capital \$50,000, is chartered to build electric railway Henryetta to Muskogee and Henryetta to Shawnee, 100 miles. Cost \$1,250,000. Incorporators, Wm. Brink, W. R. Wilson, J. W. Kincaid, C. J. Harrison and C. H. Kellog, all of Henryetta.

Okla., Oklahoma City.—Charter granted to the Oklahoma, Mexico & Pacific Railroad Co. to build a line from Oklahoma City to Childress, Tex., about 180 miles, via Colony, Sentinel, Dill City, Mangum, Hollis and other places. Joseph E. Kirkes is pres. and gen. supt., Dr. J. E. Farber 1st V.-P., J. T. Hines 2d V.-P., O. S. Rice sec.-treas., E. B. Ross chf. engr.; Giddings & Giddings of Oklahoma City and Duff & Masengale of Cordell are attorneys; temporary offices at Cordell; permanent headquarters at Oklahoma City.

S. C., Greenville.—A letter from an official denies the recent press report that the Carolina, Clinchfield & Ohio Railway contemplates building from Spartanburg to Greenville.

Tenn., Franklin.—Middle Tennessee Traction Co. is reported to have 20 miles of grade as nucleus of proposed interurban line, Franklin to Fayetteville, Tenn., via Eagleville and Shelbyville, 72 miles. Franklin to Eagleville, 23 miles, to be completed soon. Pres. L. W. Buford, Franklin Commercial Club; O. D. Berroth of Kansas City and Chicago, and H. H. Nelson of Wichita, Kans., are also reported interested, with present address care of Nashville (Tenn.) Industrial Bureau.

Tex., Corsicana.—L. E. Mitchell, Neosho, Mo., Pres. Dallas, Corsicana & Palestine Railway Co., says it proposes construction of 150 miles from Dallas to Palestine and Corsicana. Date of opening bids indefinite. H. Hedberg, Dallas, is Chf. Engr. Besides Mr. Mitchell, the directors are P. D. C. Ball, St. Louis, Mo.; Tucker Royall, Palestine; J. H. Thompson and G. J. Hedlin, Corsicana. Mr. Royall is Treas. and C. Roe Hall of Palestine Secy.

Tex., Bryan.—Bryan & Texas Central Interurban Railway Co. is building extension to Wilcox, 20 miles, from 12 miles already operating, and is authorized to use steam until electric equipment arrives. F. W. Doremus and others are interested.

Tex., Denton.—Franchise granted to P.

Turner of Dallas and associates for interurban railway through Denton to be finally extended to Krum and Wichita Falls.

Tex., Fredericksburg.—Reported that Fredericksburg Railroad now being built by R. A. Love of San Antonio from a connection with the San Antonio & Aransas Pass Railway to Fredericksburg, 23 miles, will be extended by him from Fredericksburg, perhaps to Dallas or Fort Worth.

Tex., San Benito.—The San Benito & Rio Grande Valley Railway, it is reported, will soon begin additional construction. S. A. Robertson of San Benito is Pres.

Tex., Sherman.—Texas Traction Co., J. F. Strickland of Dallas, Pres., is reported contemplating construction of extension Sherman to Anadarko, Okla.

Va., Abingdon.—Tracklaying reported begun on Virginia-Carolina Railway's extension from Blevins Station into North Carolina. The Hassinger Lumber Co. is also reported to have begun construction of two branch railroads, one from Green Cove to Park, W. E. Mingea, Abingdon, Va., is pres. of the railroad company.

Va., Richmond.—Southern Railway reported contemplates filling in some swamp and making a considerable addition of trackage to its South Richmond yards. H. P. Bayly is Asst. Engr. at Richmond and B. Herman Chf. Engr. at Washington, D. C.

Va., Richmond.—The Richmond, Fredericksburg & Potomac Railroad and the Atlantic Coast Line have accepted plans and

will erect a new passenger station fronting on Broad St. upon the site at the baseball park and the Hermitage Golf Club grounds. Trackage for 12 trains in the station will be provided besides yard tracks. S. B. Rice, Richmond, is engr. for the R. F. & P., and E. B. Pleasanton, Wilmington, N. C., is chf. engr. for the A. C. L.

Va., Williamson.—Norfolk & Western Railway reported will extend Pond Creek branch to Kirkland Coal & Coke Co.'s mines in Kentucky. C. S. Churchill, Roanoke, Va., is Chf. Engr.

### STREET RAILWAYS

Ark., Little Rock.—Little Rock Railway & Electric Co. reported let contract to Woodsmail, McCarthy & Peay to subgrade Nelmeyer extension of Highland Park line, about 2 miles.

La., New Orleans.—New Orleans Railway & Light Co. is reported contemplating construction of extension along shore of Lake Pontchartrain to Spanish Fort, Milneburg and Peoples Ave.

Tenn., Nashville.—Election will be held Sept. 25 to vote on franchise for Nashville Traction Co.; submitted to the voters after being granted by City Council and Mayor. Walter O. Parmer of Nashville and others are interested in the company.

Tex., Tyler.—Rails purchased for the Tyler Traction Co., which has completed grade to the Fair Grounds. Daniel Hewitt is interested.

## MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

### "WANTS"

**Bank Fixtures.**—Merchants & Farmers Bank & Trust Co., Natchitoches, La.—Prices on bank fixtures, safe and vault.

**Bank Fixtures, etc.**—National Bank, New Brockton, Ala.—Prices on safe, vault and other bank fixtures.

**Bank Fixtures, etc.**—Farmers and Merchants' Bank (H. B. Springs to be addressed), Georgetown, S. C.—Prices on bank fixtures, safe and vault.

**Barytes-grinding.**—W. N. Garrett, Hot Springs, N. C.—Addresses of companies that grind barytes ore.

**Bathroom Fixtures.**—E. G. Prince, 1610 Walker Ave., Houston, Tex.—Prices on bathroom fixtures.

**Bees Supplies.**—Rafael Collazo, Jr., Box 435, Playa-Ponce, P. R.—Addresses of manufacturers of bee supplies.

**Beltting.**—See "Shafting and Pulleys, etc."

**Boilers.**—Truitt Realty Co., Salisbury, Md.—Two 100-H. P. boilers.

**Boiler and Engine.**—J. N. Leonard, R. F. D. No. 1, West, Miss.—Prices on (second-hand) 25 or 30 H. P. boiler and engine.

**Brick Machinery.**—Brown Brick Co., Slinger, La.—Prices on brick machinery.

**Brick Machinery.**—C. C. Cooke, Crofton, Va.—Catalogues and prices on machinery for soft and stiff-mud bricks.

**Building Materials, etc.**—Fletcher & Smith, Clarksville, Tenn.—Manufacturers' samples and catalogues of interest to architects.

**Bucket (Orange Peel).**—John M. Greene, Drexel Bldg., Philadelphia, Pa.—Prices on (second-hand) ¾-yd. 3-peel bucket; also 1-yd. and 1½-yd. sizes; full particulars and price in first letter.

**Cableway.**—John M. Greene, Drexel Bldg., Philadelphia, Pa.—Prices on (second-hand) 500-ft. span 3-drum cableway complete, with all fittings, towers, etc.

**Canning Machinery.**—Wm. L. Dunne, Coughran via Pleasanton, Tex.—Correspondence with manufacturers of canning machinery.

**Car.**—American Stone Co., W. T. Morelton, Pres., Richmond, Va.—30 or 40-ton standard-gauge flat car.

**Cars.**—John M. Greene, Drexel Bldg., Philadelphia, Pa.—Prices on (second-hand) several 12-yd. or 16-yd. 2-way dump cars, standard gauge, M. C. B. equipment.

**Cement.**—U. S. Engineer Office, C. S. Riche, Lieut.-Col., Galveston, Tex.—Proposals until Sept. 12 for furnishing about 600 bbls. American Portland cement for lock and dam No. 8, Brazos River, delivered Downs, Tex. Information on application.

**Chains.**—Hackney Wagon Co., Wilson, N. C.—Carload of wagon chains; wants to correspond with manufacturers.

**Clocks.**—J. E. Minter, Columbus, Ga.—Correspondence with manufacturers of cuckoo clocks.

**Cold-storage Plants.**—Federal Fruit & Cold Storage Co., Whitney-Central Bank Bldg., New Orleans, La.—Correspondence with manufacturers and builders of cold-storage plants.

**Crane.**—John M. Greene, Drexel Bldg., Philadelphia, Pa.—Prices on (second-hand) 25-ton 8-wheel standard-gauge locomotive crane, 40 to 50-ft. boom for clamshell work.

**Creamery Machinery.**—Wm. L. Dunne, Coughran via Pleasanton, Tex.—Correspondence with manufacturers of creamery machinery and appliances.

**Dam Construction and Equipment.**—Alexander Boynton, Crystal City, Tex.—Estimates on equipment (hydraulic dredge) to construct dam across Neches River, 1 miles from Crystal City; dam 53 ft. high, 20 ft. crown, 400 ft. long; upstream slope 3 to 1; downstream, 2 to 1; about 35,000 yds. earth; also desires correspondence with parties who would lease outfit or construct by contract. (Recently noted.)

**Dike Construction.**—U. S. Engr. Office, Savannah, Ga.—Bids until Sept. 30 for constructing protection dikes in Savannah River near Augusta, Ga.; information on application. Dan C. Kingman, Col., Engrs.

**Dikes.**—Board of Commissioners, Red River, Atchafalaya and Bayou Boeuf Levee District, Alexandria, La.—Bids until Sept. 4 at office Board of State Engineers, 213 New Orleans Court Bldg., New Orleans, for following protection work at and near lower end levee line, St. Landry parish: Spur Dikes, timber and earth work; former about 300,000 ft. B. M. and latter 1200 cu. yds.; Atchafalaya River, right bank.

**Drainage and Machinery.**—Z. C. Balentine, Anderson, S. C.—Correspondence with engineers or contractors relative to draining 1200 to 1500 acres marsh land; also prices on machinery for this work.

**Dredging, etc.**—U. S. Engineer Office, C. S. Riche, Lieut.-Col., Engrs., Galveston, Tex.



Bids until Oct. 3 for dredging in Texas City channel and constructing pile dike along channel. Information on application.

**Dust-down Machinery, etc.**—J. H. Witherington, Dublin, Ga.—Information relative to machinery for and manufacture of floor dust-down in 100-lb. lots.

**Electric Wiring, etc.**—Board of Trustees, Wm. Rice Institute, Houston, Tex.—Bids until Sept. 15 for electric work in two-story fireproof physical laboratory; plans, specifications, etc., obtainable on application at office Cram, Goodhue & Ferguson, Scanlan Bldg., Houston, on deposit of \$50.

**Electrical Machinery.**—Hazard-Dean Coal Co., S. Davis Hughes, Supt., Hazard, Ky.—Prices on 6-ton motors and electric mine machine.

**Electrical Machinery.**—See "Mining Machinery."

**Engine.**—See "Telephone Equipment, etc."

**Engine.**—Truitt Realty Co., Salisbury, Md.—100-H. P. engine.

**Engine.**—See "Boiler and Engine."

**Filtration Plant.**—See "Pumping Station and Filtration Plant."

**Filtration Plant.**—Louisville Water Co., Theodore A. Lelsen, Chief Engr., Louisville, Ky.—Bids Sept. 23 for mechanical filters; 36,000 gals. capacity.

**Fireproof Doors, etc.**—E. C. Stuart, Bartow, Fla.—Prices on fireproof doors and windows, latter wire glass, with metal frames.

**Flooring.**—I. C. Garber, contractor and builder, Box 514, West Jackson, Ind. Sta., Jackson, Miss.—About 6000 ft. quarter-sawn oak flooring and 1000 ft. maple f. o. b. Jackson.

**Glass Manufacturers.**—See "Toothbrushes."

**Grading.**—Board of Commissioners, 509 District Bldg., Washington, D. C.—Bids until Sept. 8 for grading certain streets; 23,000 cu. yds.; proposal forms, specifications, etc., obtainable at office of Chief Clerk, 427 District Bldg.

**Heating and Power System.**—Office of Elliott Wood, Supt. United States Capitol Building and Grounds, Washington, D. C.—Bids until Sept. 10 for heating and power system for courthouse; plans and specification on application and check for \$10.

**Hot-water Tank, etc.**—Treasury Dept., office of O. Wenderoth, supervising architect, Washington, D. C.—Bids until Sept. 23 to furnish and install hot-water tank, etc., at Winder Bldg., Washington; copies of specifications obtainable at this office.

**Ice-cream Machinery.**—T. M. Spinks, Shubuta, Miss.—Equipment for ice-cream factory.

**Ice Machinery.**—T. M. Spinks, Shubuta, Miss.—Ice machinery, 5 tons capacity.

**Ice Machinery.**—Truitt Realty Co., Salisbury, Md.—Second-hand 20 to 30-ton ice machinery equipment.

**Interior Finish, etc.**—State Capitol Commission, John I. Moore, Chrm., Little Rock, Ark.—Bids until Sept. 29 for constructing terraces and interior finish for new State Capitol; drawings and specifications at offices of Capitol Commission and Cass Gilbert, architect, 11 E. 24th St., New York.

**Iron Pipe, etc.**—Isthmian Canal Commission, F. C. Boggs, Major, General Purchasing Officer, Washington, D. C.—Bids until Sept. 11 to furnish iron pipe and fittings, expansion joints, clean-outs, steam traps, copper gaskets and magnesium pipe coverings. Copies of circular (No. 792) may be obtained from this office or offices of assistant purchasing agents, 24 State St., New York, and 614 Whitney-Central Bldg., New Orleans; also from U. S. Engineer offices in Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City, Mo., and Chamber of Commerce, Quincy, Ill.

**Leather-sewing Machine.**—W. A. Kimbell, Berry, Ala.—Addresses of manufacturers of machines for sewing leather (repair work).

**Levee Construction.**—Board of Commissioners, Texas Basin Levee District, Rayville, La.—Bids until September 4 at office Board of State Engineers, 213 New Orleans Court Bldg., New Orleans, for following levee work in Chicot county, Arkansas: Gaines Landing Levee, enlargement, 30,000 cu. yds.; deposit \$150.

**Levee Construction.**—Executive Department, Luther E. Hall, Governor, Baton Rouge, La.—Bids until Sept. 4 at office Board of State Engineers, 213 New Orleans Court Bldg., New Orleans, for following levee work: S. Joseph Church levee, St. James

parish, Mississippi River, left bank, 50,000 cu. yds., deposit \$275; Ben Ruth Lake levee, Avoyelles parish, Red River, right bank, 50,000 cu. yds., deposit \$300; Schoolhouse South levee, Avoyelles parish, Red River, left bank, 40,000 cu. yds., deposit \$175; Iron Mountain Crossing to Hynsons levee, Rapides parish, Bayou Rapides, south bank, 20,000 cu. yds., deposit \$125.

**Level.**—J. D. Wyrick, Gurley, Ala.—Prices on new or second-hand engineer's level.

**Marble Work, etc.**—Elliott Wood, Supt. United States Capitol Building and Grounds, Washington, D. C.—Bids for interior trimmings and finish, plain and ornamental plastering, interior marble work, plate glass, extension of mail chutes and gravity conveyors, hardware, electric-lighting fixtures, plumbing and steamfitting materials; plans and specifications issued soon, with information as to dates of opening bids.

**Mattress Machinery, etc.**—T. J. Troublefield, Greer, S. C.—Prices on machinery to manufacture cotton and excelsior mattresses, comforts, etc.

**Metal Workers.**—See "Toothbrushes."

**Mining Machinery.**—Acme Anthracite Coal Co., J. C. Humphrey, Secy., Russellville, Ark.—Interested in electrical mining machinery.

**Mining Machinery.**—See "Electrical Machinery."

vitrified brick paving laid flat; plans and specifications, etc., at office of City Engineer; separate bids on grading, curbing and paving; W. F. Divine, City Clerk.

**Paving.**—Board of Public Works, S. Bloom, Chrm., Pine Bluff, Ark.—Bids until Sept. 15 to construct concrete sidewalks on Tennessee and Alabama Sts.; W. A. Lee, clerk.

**Plows.**—See "Oil Tractors, etc."

**Plumbing.**—See "Bathroom Fixtures."

**Pumps.**—Myrtle Beach Farms Co., Myrtle Beach, S. C.—Addresses of manufacturers of rotary pumps suitable for drainage.

**Pumping Plant.**—Commissioners Henderson County Drainage Districts 1 and 2, Office of County Clerk, Oquawka, Ill.—Bids until Sept. 25 on steam-driven drainage pumping plant, containing two centrifugal pumps, each with capacity 55,000 gals. per minute against maximum static pumping head 14 ft.; alternative bids on complete electric-driven pumping plant, same capacity. For information address Harman Engineering Co., Peoria, Ill.

**Pumping Stations and Filtration Plant.**—City of Jackson, Miss.—Bids until Sept. 24 for construction of 2 pumping stations and mechanical filtration plant. Contract No. 1, river intake, low lift station and main station; No. 2, filtration plant with equipment, etc.; No. 3, about 135 tons 24-in.

bids will be tabulated and opened at council meeting Oct. 1.

**Road Construction.**—Board of Awards, Ezra B. Whitman, Water Engr., City Hall, Baltimore, Md.—Bids until Sept. 17 for constructing Road No. 3, Gunpowder Supply Contract No. 24, 1.7 miles macadam or concrete; approximate quantities, clearing and grubbing, 1 acre; stripping, 2000 sq. yds.; excavation, 7100 cu. yds.; rubble masonry, 30 cu. yds.; 60 sq. yds. cobble paving; 5 sq. yds. road drains; 207 lin. ft. 18x18 in., 131 lin. ft. 24x24 in., 31 lin. ft. 36x24 in., 30 lin. ft. 48x36 in. and 78 lin. ft. 48x48 in. reinforced concrete culvert; 77 cu. yds. concrete end walls; 1000 lin. ft. underdrains; 23-ft. span reinforced concrete bridge; 6888 sq. yds. (each) 8 and 6 in. water-bound macadam or 13,776 sq. yds. 6 in. concrete pavement; plans and specifications obtainable at office of Water Engr.

**Road Construction.**—Ohio County Commissioners, Geo. W. Oldham, Clerk, Wheeling, W. Va.—Bids until Sept. 6 for paving with brick certain portions county roads; National road (2 locations), Greysville, Clinton and Potomac road, Fairmont pike (2 locations), Wheeling and Elm Grove road; plans, etc., at office of County Commissioners.

**Road Construction.**—Montgomery County Commissioners, Jos. T. White, Pres., Rockville, Md.—Bids until Sept. 16 for water-bound macadam construction of section of post-road from Rockville line 28,444 ft. to Potomac; plans and specifications at office of Public Roads, Department of Agriculture, Washington, D. C.; of Maryland State Roads Commission, Baltimore, and of County Commissioners, Rockville.

**Road Construction.**—Highway Department, Board of State Engrs., 104 New Orleans Court Bldg., New Orleans, La.—Bids until Sept. 8 for constructing main public highway Mansfield to Benson, La., 12 miles; W. E. Atkinson, State Highway Engr.; Frank M. Kerr, Chief State Engr.

**Roofing.**—Mrs. W. J. Moore, Morehead City, N. C.—Addresses of manufacturers of rubberoid or other roll roofing.

**Sawmill.**—J. N. Leonard, R. F. D. No. 1, West, Miss.—Prices on second-hand sawmill, 50 or 60-in. saw.

**Sewers.**—Office of City Auditor, Tulsa, Okla.—Bids until Sept. 8 for constructing sanitary sewer system and sub main sewer in District No. 82; plans and specifications in office of T. C. Hughes, City Engr.

**Sewers.**—See "Paving and Sewers," Tenn., Johnson City.

**Sewers.**—Board of Commissioners, Ennis M. Douglas, clerk, Memphis, Tenn.—Bids until Sept. 2 for furnishing labor, tools, hauling and material (except vitrified pipe, manhole and inlet rims and covers which will be furnished by city) and doing following drainage work: 730 lin. ft. 3x3-ft. concrete culvert; 125 lin. ft. 27-in., 40 lin. ft. 24-in. and 110 lin. ft. 15-in. pipe, 0 ft. to 6-ft. cut; 4000 sq. ft. sidewalk replaced; 105 sq. yds. gravel replaced; 6 No. 7 inlets; 1 No. 6 inlet and 2 manholes; plans and profiles at office of City Engr.; Ennis M. Douglas, clerk.

**Sewers.**—Passaic Valley Sewerage Commissioners, John S. Gibson, Clerk, Essex Bldg., Clinton St., Newark, N. J.—Bids until Nov. 18 for following work, section 1, in connection with tunnel under New York Bay: Item 1, furnishing and placing in trenches dredged below bed of bay, 2 lines, 96 in. reinforced concrete pipes, 3000 lin. ft.; Item 2, reinforced concrete pipes, with horizontal and vertical branches, having diams. ranging from 24 in. to 96 in., 1500 lin. ft.; Item 3, rip-rap, 1/2 to 3 tons stones, in trenches, for 24 in. to 96 in. reinforced concrete pipes and branches, 30,000 tons; Item 4, rock excavation in dredge trenches, 100 cu. yds.; drawings and specifications, etc., obtainable at Commissioners' office from Wm. M. Brown, Chief Engr. (Other work previously noted.)

**Sewer Construction.**—City of Coalgate, Okla.—Lots contract Sept. 10 for about 9000 lin. ft. sewer; 534 lin. ft. 8 in., 3270 ft. 15 in. and 350 ft. 18 in. pipe; 19 manholes; 5958 cu. yds. earth and 336 cu. yds. rock excavation; plans and specifications at office of Asa Montgomery, City Clerk.

**Shafting, Pulleys, etc.**—C. J. Lassiter, Neuse, N. C., R. F. D. No. 3.—Will purchase line shaft; belting; pulleys.

**Showcases.**—Southern Map Co., 511 Southern Bldg., Wilmington, N. C.—Small cases to display drawing instruments and artists' materials.

**Sheet Iron.**—Pennington Gas Generator Co. (Dr. E. V. Pennington and C. W. Myers), Morristown, Tenn.—Prices on sheet iron, 24 gauge, 48 in. wide.

**Steam Hammer.**—Box 127, Charlotte, N. C.—Steam hammer capable of driving sheet-

FOR the benefit of business concerns, engineers, contractors, machinery manufacturers, dealers and others who find it profitable to follow up daily the industrial, commercial, railroad and financial development of the South and Southwest as published in this Construction Department,

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**Mixer.**—Box 127, Charlotte, N. C.—One-half-yard mixer, with automatic hoist, power and trucks; second-hand.

**Oil Tractors, etc.**—D. M. Blanding, Hendersonville, N. C.—Information, from manufacturers, on oil tractors; also power plowing machinery.

**Paving.**—City of Raleigh, N. C., James I. Johnson, Mayor.—Bids until Sept. 8 for paving 30,000 to 40,000 sq. yds. with asphalt macadam or asphalt concrete.

**Paving and Sewers.**—Office of P. F. McDonald, City Commissioner, Johnson City, Tenn.—Bids until Sept. 8 (extended date) for constructing paving with asphalt, brick, blut-lithic, wood block, granite, asphaltic concrete, concrete or tarva for Improvement Districts Nos. 19, 25, 26, 27, 28, 29 and 30, according to plans and specifications in office of City Engr.; approximate quantities: 90 yds. street-car paving, 17,052 yds. paving, including grading, 7634 lin. ft. curb and gutter, 3510 lin. ft. 6-inch sewer connections, 2075 lin. ft. 8-inch vitrified sewer, 205 lin. ft. 12-inch sewer, 6 manholes and 1 catch-basin; William H. Powder, Recorder.

**Paving.**—City of Natchitoches, La., Geo. W. Kile, Mayor.—Bids until Sept. 9 to pave or gravel about 40,000 sq. yds. on 3d, Toulaine, Amulet, Ragan, 3d, Bossier and Sibley Sts.; plans and specifications at Mayor's office.

**Paving.**—City Commissioners St. Petersburg, Fla.—Bids until Oct. 6 to grade, curb and pave on Seventh Ave. north from west line of 2d St., Seventh Ave. north from west line of 9th St., 11th St. from north line of Seventh Ave., and Sixth Ave. north from west line of 1st St.; concrete curb 6x15 in.;

cast-iron pipe and specials; No. 4, 5 valves, 6 in. to 30 in.; No. 5, two 200-H. P. water-tube boilers, feed-water heater, feed pumps and steam piping; No. 5, A. B. C. D. boilers and furnishing separately heaters above mentioned in contract No. 5; No. 5E, erecting heater, pumps and piping; No. 6, 4,000,000-gallon-per-day pumping engine and hand traveling crane; No. 7, radial brick chimney; No. 8, moving from existing station and installing in new station two pumping engines and boiler, etc.; No. 9, two motor-driven centrifugal pumps, with piping, starting apparatus and wiring; also 2 motor-driven sump pumps; No. 10, two 75-K. W. generator sets, with switchboard and wiring and 2000 ft. transmission line; information, specifications, etc., on application to Massena L. Culley, City Engr.; L. J. Monahan, City Clerk.

**Refrigerating Machinery.**—Wm. L. Dunne, Coughran via Pleasanton, Tex.—Correspondence with manufacturers of refrigerating machinery for small plant.

**Refrigerating Equipments.**—Navy Department, Bureau of Yards and Docks, Washington, D. C.—Bids until Oct. 11 for refrigerating equipments and building construction for naval hospitals, Chelsea, Mass.; Portsmouth, N. H.; Newport, R. I., and Norfolk, Va.; estimated cost \$25,000; plans and specifications on application to bureau; H. R. Stanford, chief.

**Road Construction.**—Committee on Streets and Roads, F. B. Evenson, chairman, Highland Park P. O., Richmond, Va.—Bids until Sept. 1 for graveling about 45,000 sq. yds. roadbed; John M. Lewis, Supt., advises

ing and 8 in. round piles; second-hand, good condition.

**Steel and Miscellaneous Iron Work, etc.**—Isthmian Canal Commission, F. C. Boggs, Major, General Purchasing Officer, Washington, D. C.—Proposals until Sept. 17 to furnish steel and miscellaneous iron work for torpedo storehouses, track pilerdriver, steel reinforcing bars, shovels, picks, forges, grindstones, steel cable, valves, grease cups, roofing, sheet copper, coal tar, zinc, aluminum sulphate, linseed oil, putty, doors, windows, etc. Copies of circular (No. 793) obtainable from this office or offices of assistant purchasing agents, 24 State St., New York; 614 Whitney-Central Bldg., New Orleans, and 1086 North Point St., San Francisco; also from U. S. Engineer offices in Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile, Galveston, Seattle and Los Angeles; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill.; Commercial Club, Tacoma, Wash., and Chamber of Commerce, Portland, Ore.

**Steel Rolling Doors.**—Isthmian Canal Commission, F. C. Boggs, Major, General Purchasing Officer, Washington, D. C.—Proposals until Sept. 15 to furnish steel rolling doors for permanent shop buildings. Blanks and general information relating to this circular (No. 795) may be obtained from this office or offices of assistant purchasing agents, 24 State St., New York, and 614 Whitney-Central Bldg., New Orleans; also from U. S. Engineer offices in Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City, Mo., and Chamber of Commerce, Quincy, Ill.

**Stump-pulling Machinery.**—Bickenback Land & Development Co., Laredo, Tex.—Addresses manufacturers of or dealers in stump-pulling or grubbing machines.

**Telephone Equipment, etc.**—Southern Bell Telephone & Telegraph Co., Geo. J. Yundt, engineer, 78 S. Pryor St., Atlanta, Ga.—Prices on telephone equipment, including gas engine, storage batteries, main district frames, racks, No. 1 4900 line common battery switchboard, etc., for Birmingham, Alabama.

**Timber Sizer.**—P. O. Box 137, Ft. Wayne, Ind.—Second-hand timber sizer, about 24x14 in. (S. A. Woods preferred).

**Toothbrushes.**—Dye Formo Aseptic Co., Frank E. Hale, Pres., Vicksburg, Miss.—Correspondence with manufacturers relative to furnishing toothbrushes of special design in large quantities; also with glass blowers and metal workers for making certain parts of sterilizer (in large quantities).

**Water-works.**—Bond Commission, Cordele, Ga.—Bids until Sept. 18 from manufacturers for 100,000-gal. tank and tower, 1,500,000-gal. pumping engine, 72x18 high pressure R. T. boilers, 350-ft. comp. duplex air compressor, 30 gate valves, 30 fire hydrants and 250 tons C. I. pipe, principally 3 in.; proposals received from contractors for furnishing all materials except pipe and laying 3 miles water mains, constructing 250,000-gal. reinforced concrete reservoir, brick pumping station and 48 in. x 90 ft. brick or concrete circular stack; plans and specifications at offices G. S. Harris, City Clerk, and Arthur Pew, Consulting Engr., Atlanta, Ga.

**Water-works, Pipe, etc.**—Isthmian Canal Commission, F. C. Boggs, Major, General Purchasing Officer, Washington, D. C.—Bids until Sept. 19 to furnish cast-iron bell and spigot pipe, tees, curves, sleeves and reducers, valves and jute for Panama water-works; also frames, casement doors and sashes, and screen sashes for administration building. Blanks and general information relating to this circular (No. 794) may be obtained from this office or offices of assistant purchasing agents, 24 State St., New York; 614 Whitney-Central Bldg., New Orleans, and 1086 North Point St., San Francisco; also from U. S. Engineer offices in Seattle, Los Angeles, Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill., and Commercial Club, Tacoma, Wash.

**Well-drilling Equipment.**—Oklahoma Oil & Gas Co., 212 Majestic Bldg., Oklahoma, Okla.—Drilling outfit, 3 1/2 to 16 in. castings and incidentals; drilling capacity 1900 or more feet; delivery Reynolds, Okla.

**Wire Glass.**—O. M. Wood & Son, 341 Main St., Cor. of 4th, Carrollton, Ky.—Addresses of manufacturers of wired glass for skylights.

**Wiring System, etc.**—Treasury Dept., O. Wenderoth, supervising architect, Washington, D. C.—Bids until Sept. 24 for conduit and wiring system, and lighting fixtures, at United States courthouse and postoffice, Huntsville, Ala.; copies of drawings and specifications obtainable at this office, or at office of custodian, Huntsville.

**Woodworking Machinery.**—Dupont Railway & Land Co., A. V. Burch, Gen. Mgr., Dupont, Fla.—Prices on fast feed flooring machine and outside molder; new or second-hand.

**Woodworking Machinery.**—High Point Furniture Co., High Point, N. C.—Second-hand or rebuilt double-end tenoner.

## FINANCIAL NEWS

The MANUFACTURERS RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

### Review of the Baltimore Market.

Office MANUFACTURERS RECORD, Baltimore, Md., September 3.

The Baltimore stock market was very dull during the past week, and the double holiday of Saturday and Monday also helped to reduce the number of transactions. In the trading United Railways common sold from 27 1/2 to 27; do. income bonds, 63 3/4 to 63 1/2; do. funding 5s, 87 3/4 to 86 for the larger and 87 to 87 1/2 for the smaller denominations; do. 4s, 83 to 83 1/2; Consolidated Gas, Electric Light & Power common, 109 1/4 to 113 1/2, with last sale at 112 1/2; do. preferred, 111 to 115, reacting to 114; do. 4 1/2s, 87 to 87 1/4; Seaboard 4s, 83 1/2; Mt. Vernon-Woodberry Cotton Duck 5s, 68 1/4 to 68; G.-B.-S. Brewing 4s, 43 1/2 to 44.

Bank stocks sold thus: Exchange, 160; National City, 95; Merchants-Mechanics, 33; Munsey Trust sold at 100 and Fidelity & Deposit at 159 to 159 1/4.

Other securities were traded in as follows: Consolidation Coal, 94 1/2; do. convertible 6s, 99 3/4 to 100; Baltimore City 4s, 196 1/2, 93 1/2 to 94; do. 3 1/2s, 1980, 80 1/2 to 81; do. 4s, 1951, 94; do. do. 1958, 94; Anacostia & Potomac 5s, 98 1/4; Arundel Sand & Gravel 6s, 98 to 98 1/2; Washington, Baltimore & Annapolis 5s, 84; Georgia Southern & Florida 5s, 102; Pennsylvania Water & Power 5s, 90 1/4 to 91; Norfolk Railway & Light 5s, 97 3/4 to 98; Atlantic Coast Line of Connecticut 5-20s, 87 1/2; Baltimore, Sparrows Point & Chesapeake 4 1/2s, 95 1/4; City & Suburban (Washington) 5s, 100 1/2 to 100 3/4; Chicago Railways 5s, 98; Houston Oil common, trust certificates, 17 to 16 1/2; do. preferred do., 57 1/2; Fairmont & Clarksburg Traction 5s, 99 3/4 to 99 1/2; Pennsylvania Water & Power common, 70 1/4 to 70; Alabama Consolidated Coal & Iron 5s, 70; Baltimore Electric preferred, 43 1/2 to 42 1/2; Baltimore Electric 5s, stamped, 98 1/4.

### SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended September 3, 1913.

Railroad Stocks.	Par.	Bid.	Askd.
Atlantic Coast of Conn.	100	237	245
Ga. Sou. & Fla. 1st Pfd.	100	80	90
Norfolk Railway & Light	100	25	27 1/2
Seaboard Air Line Com.	100	18 1/2	19 1/2
Seaboard Air Line Pfd.	100	44 1/2	45 1/2
United Rys. & Elec. Co.	50	26 1/2	27 1/2

Bank Stocks.	Par.	Bid.	Askd.
Bank of Baltimore	100	134	
Bank of Commerce	15	30	33
Farmers & Merchants	40	46	49
German	100	110	
Merchants-Mechanics	100	23	
National City	100	95	100
Union	100	135	140

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Askd.
Continental Trust	100	200	
Fidelity & Deposit	50	159 1/2	
Merc. Trust & Dep.	50	165	
Munsey Trust (Wash.)	100	90	
U. S. Fidelity & Guaranty	100	190	197

Miscellaneous Stocks.	Par.	Bid.	Askd.
Baltimore Electric Pfd.	50	43	44
Con. Gas, Elec. Lt. & P. Com.	100	112 1/2	113
Con. Gas, Elec. Lt. & P. Pfd.	100	112	113 1/2
Consolidation Coal	100	95 1/2	97
G.-B.-S. Brewing Co.	100	2 1/2	3

Railroad Bonds.	Par.	Bid.	Askd.
Alabama Midland 5s.	102 1/2	103 1/2	
Atlantic Coast 1st 4s.	100	91 1/2	
At. Coast Conn. 4s, Cfs. 5-20s.	87	92 1/2	
At. Coast Conn. 5s.	100	103	
Carolina Central 4s.	83		
Charleston & West. Car. 5s.	101 1/2		
Coal & Iron Railway 5s.	97		
Georgia & Alabama 5s.	102		
Ga. Car. & North. 1st 5s.	102		
Ga. South. & Fla. 1st 5s.	101 1/2	103	
Macon, Dublin & Sav. 5s.	96 1/2		
New Orleans, M. & C. 5s.	100 1/2	51	
Potomac Valley 1st 5s.	100 1/2		
Sav. Fla. & West. 5s.	103		
Seaboard Air Line 4s.	103 1/2		
Seaboard 4s, Stamped.	83 1/2	81	
Southern Railway Con. 5s.	103 1/2	103 1/2	
Wilmington & Weldon 5s.	105		
Wash., Balto. & Annap. 5s.	84 1/2		

Street Railway Bonds.	Par.	Bid.	Askd.
Anacostia & Potomac 5s.	98 1/2	98 1/2	
Balto., Sp. Pt. & C. 4 1/2s.	95	95 1/2	
Balto. Traction 1st 5s.	102 1/2	104	
Balto. Traction (N. B.) 5s.	102 1/2	104	
Charleston City Railway 5s.	100 1/2	102	
Charleston Con. Elec. 5s.	92 1/2		
City & Suburban 5s (Balt.).	101 1/2	102	
City & Suburban 5s (Wash.).	100 1/2	100 1/2	
Danville Traction 5s.	92 1/2	94 1/2	
Fairmont & Clarksburg Trac. 5s.	99 1/2	100	
Knoxville Traction 5s.	100 1/2		
Maryland Electric Railways 5s.	97	97 1/2	
Newport News & Old Point 5s.	97		
Norfolk & Portsmouth Trac. 5s.	87 1/2	88	
Norfolk Railway & Light 5s.	97 1/2	98	
Norfolk Street Railway 5s.	102 1/2		
Norfolk & Atlantic Ter. 5s.	92 1/2		
United Railways 1st 4s.	63	63 1/2	
United Railways Income 4s.	63	63 1/2	
United Railways Funding 5s.	87	87 1/2	
United Railways Notes 5s.	108	109 1/2	
Virginia Ry. & P. 5s.	92 1/2		

Miscellaneous Bonds.	Par.	Bid.	Askd.
Ala. Con. Coal & Iron 5s.	70	72	
Arundel Sand & G. 6s.	97 1/2	98 1/2	
Baltimore Electric 5s, Stp.	97 1/2	98 1/2	
City Baking Co. 1st 6s.	92		
Consolidated Gas 5s.	104		
Consolidated Gas 4 1/2s.	92 1/2		
Con. Gas, Elec. Lt. & P. 4 1/2s.	86 1/2	87 1/2	
Consolidation Coal 6s.	99 1/2	100	
Fairmont 1st 4s.	93 1/2		
G.-B.-S. Brewing 1st 4s.	43 1/2	44 1/2	
G.-B.-S. Brewing Income 5s.	8 1/2	9	
Janison Coal & Coke 5s.	92		
Mt. Vernon-Woodberry Cot. Duck 5s.	68	68 1/2	
Penna. Water & Power 5s.	90 1/2	91 1/2	
St. Joseph R. L. H. & P. 5s.	98		

### FINANCIAL CORPORATIONS.

Ala., New Brocton.—First National Bank of New Brocton incorporated; capital \$25,000; business is to begin Nov. 1; organizers, H. M. Sessions, J. E. Jones, L. Sessions, M. P. Adams and J. L. Brock.

Ark., Grady.—Bank of Grady incorporated. Previously mentioned.

Ark., Malvern.—New bank capitalized at \$25,000 reported organized by local capital.

Ark., Malvern.—A. B. Banks, Fordyce, is organizing new bank with \$50,000 capital.

D. C., Washington.—A new bank with \$75,000 capital is reported being organized, to be located at 14th and Corcoran Sts. N. W.; Allen C. Clark, principal promoter.

Fla., Gainesville.—Phifer State Bank, cash capital \$50,000, will, it is reported, ask incorporation to succeed Phifer Bros. bankers. W. B. Phifer, Pres.; Henry M. Chitty, V.-P.; H. L. Phifer, Cash. Other directors are J. C. Bishop, W. M. Johnson, A. M. Edwards, C. Addison Pound and S. B. Phifer. Quarters in the Phifer Bldg.

Fla., Key West.—South Florida Investment Co. of Key West will apply for charter October 15; a real estate concern; capital \$10,000. Incorporators: George A. T. Roberts, Pres.; George B. Graham, V.-P.; Charles H. J. Roberts, Secy.; William T. Archer, Treas.; William H. Malone, Jr., Atty.; J. Frank Roberts, T. M. Bryan, Charles H. Thompson and Charles H. Ketchum being also directors and all of Key West.

Fla., Sanford.—Organized: Seminole County Bank; capital \$50,000; directors, Forrest Lake, Pres.; D. L. Thrasher, V.-P.; A. P. Connelly, A. T. Rosseter and others. Business begins Sept. 15.

Ga., Albany.—Farmers and Merchants' Bank chartered and incorporated; capital \$25,000; J. J. Battle, Moultrie, Ga.; G. R. Battle, Albany, and J. F. Lewis, Valdosta, Ga. Business begins about Sept. 28.

Ky., Bowling Green.—Warren State Bank of Bowling Green is reported to have applied for conversion as the Warren National Bank, capital \$100,000. J. N. Russell is Pres., Chas. Roemer V.-P., and L. V. Cornelius is Cash. Present capital \$50,000.

Ky., Jackson.—Arrangements are reported complete for merging the Breathitt County Bank and the Hargis Commercial Bank into a new institution called the Hargis Commercial Bank & Trust Co.; capital \$75,000. A. H. Hargis will be Pres., J. P. Crawford, V. P., and John H. Hindman, Cash.

Ky., Louisville.—Chartered: Inter-Southern National Life Insurance Co. of Louisville. This is a merger of Inter-Southern

and Southern National Life Insurance companies.

Ky., McRoberts.—McRoberts State Bank has begun business; capital \$25,000; John G. Breckingham, Pres.; Walter S. Perry, Cash.; John C. C. Mayo is V.-P.; J. N. Camden also interested. Previously mentioned.

La., Natchitoches.—Chartered: Merchants & Farmers' Bank; capital \$30,000, paid in. H. E. Bath, Cash. Directors, V. L. Roy, Sam Aaron, Jeff DeBhenx, R. Murphy, M. Semmelman, W. T. Cunningham, W. T. Smith, all of Natchitoches; Hyman Cohen, Cloutierville. Business begins Nov. 1.

La., New Orleans.—Incorporated: Fidelity Development & Investment Co., 705 Gravier St.; capital \$100,000. Ernest J. Coulon, Pres.; J. Wilfred Gaidry, V.-P.; Wm. H. Heyl, Secy.-Treas. Business has begun.

La., Ruston.—First National Bank, capital \$50,000, has applied for authority to organize. J. S. Sims, R. B. Dawkins, J. M. Davis, R. W. Davis and J. W. Williams are interested.

Miss., Heidelberg.—Bank of Heidelberg, previously mentioned, is chartered and incorporated; capital \$15,000; began business Aug. 15; W. L. Elkins is Cash.

Mo., Hickory.—Organized: Farmers' Bank of Hickory; capital \$10,000; stockholders, S. D. Kerns, Chillicothe, Cash.; William Altenderfer, John Porter, Theodore Bratton and others.

Mo., Neosho.—Chartered: Newton County Bank; capital paid up \$40,000; incorporators, L. E. Mitchell, W. E. Sims, Leslie D. Rice, M. T. Rice, T. C. Hatter, W. F. Armstrong and W. A. Phipps.

N. C., Newland.—Chartered: Avery County Bank; authorized capital \$25,000; business begins Sept. 15, 1913; E. C. Guy, cashier; J. W. Ragland and F. H. Edmonson, Newland, N. C.; M. B. Hughes, Hughes, N. C.; Ralph Young, Minneapolis, N. C.; C. B. Von Canon, Banner Elk, N. C.

N. C., Bakersville.—Chartered: Merchants & Farmers' Bank; authorized capital \$50,000, with \$10,000 paid in. Geo. L. White, D. E. Hudgins and J. L. Morgan, all of Marion.

N. C., Newland.—Chartered: Avery County Bank; authorized capital \$25,000, paid in \$5,000; stockholders, J. W. Ragland, L. B. Hughes and others.

Okla., Ringling.—First National Bank, capital \$50,000, has applied for authority to organize. J. J. Cloughley of Cornish, Okla.; L. P. Anderson, A. W. Hammond, D. B. Turner, L. Jackson and D. Lacy are interested.

S. C., Ellorree.—Bank of Ellorree and People's Bank reported consolidated under name of Bank of Ellorree; capital \$50,000; Robert Lide of Orangeburg, Pres.; A. A. Dantzer and W. M. Fair, V.-Ps.; Preston P. Hungerpiller, Cash., and Allen F. Lide, Asst. Cash.

S. C., Georgetown.—Farmers and Mechanics' Bank of Georgetown, previously mentioned, capital \$30,000, will organize September 15 and begin business about December 1; is an entirely new concern and is to be chartered; incorporators, Holmes B. Springs (who should be addressed), C. G. Barr, I. McG. Carraway and J. H. Fraser.

S. C., Pacolet.—Chartered: Bank of Pacolet; capital \$20,000. R. P. Morgan, Pres.; J. E. McMillan, Cash.

Tenn., Knoxville.—Atlas Investment Co., capital \$100,000; incorporators, S. R. Rambo, D. C. Webb, J. Bailey Ray, John W. Green and C. B. Johnson.

Tex., Boerne.—Kendall County Abstract Co., capital \$1200, chartered; incorporators, John Reinhard, H. J. Graham, J. C. Reinhard and others.

Tex., Carrozo Springs.—Guaranty State Bank, capital \$10,000, organized. A. Eardley, Pres.; E. Buck, 1st V.-P.; Dr. J. Q. Burton, 2d V.-P.; H. M. Ferguson, Cash.

Tex., Chisolo.—The Bank of Chisolo, a private institution, organized with \$10,000 capital; begins business Sept. 1. Charles E. Tips, R. W. Vordenbaum, F. J. Werner, A. G. Schrant, Anton T. Pheil. It is proposed to change to national bank with \$25,000 capital.

Tex., Fort Worth.—Southern Co-operative Life Insurance Co., incorporated, \$200,000 insurance paid up, began business August 19; D. M. Doyle, Fort Worth, Pres.; A. L. Houston, Arlington, V.-P.; G. T. Bludworth, Fort Worth, Secy.; C. M. Mitchell, Arlington, Treas.; John W. Pope, Dallas, attorney; Dr. W. D. Little, Fort Worth, medical director.

[For Additional Financial News, See Page 86.]



**Merchants-Mechanics National Bank**

South and Water Sts., BALTIMORE, MD.  
 DOUGLAS H. THOMAS, President.  
 JNO. B. RAMSAY, V.-P. and Chm. Bd. of Dir.  
 WM. INGLE, Vice-President.  
 JOHN B. H. DUNN, Cashier.  
 Capital \$2,000,000 Deposits \$21,670,000  
 Surplus and Profits \$2,175,000  
 Accounts of Banks, Bankers, Corporations and Individuals solicited.  
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 United States Depository and Disbursing Agent  
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 Surplus and Undivided Profits 40,000  
 A general banking business transacted.  
 Special attention given to collections.

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 Cotton Mill Stock a Specialty  
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 J. ERNEST SMITH, President and Gen. Counsel.  
 WM. G. TAYLOR, Vice-Pres. and Treasurer.  
 HARRY W. DAVIS, Vice-Pres. and Secretary.  
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From Municipalities and Contractors. Write us if you have entire bond issues for sale.  
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**The First National Bank**

17 South St., Baltimore, Md.  
 Capital, - - - \$1,000,000  
 Surplus and Net Profits, - - - 400,000  
 Deposits, - - - 6,500,000  
 Especially well equipped to handle the business of Southern Banks, Corporations, and Individuals and Manufacturers. We cordially invite correspondence and interviews.

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OF BALTIMORE, MD.  
 Hopkins Place, German and Liberty Streets  
 Capital, \$1,000,000  
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 R. VINTON LANSDALE, Cashier.  
 C. G. MORGAN, Asst. Cashier.  
 Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals invited

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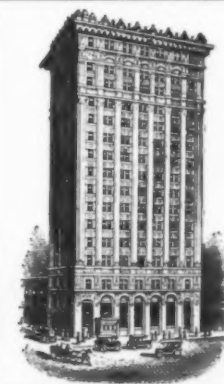
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**Issued \$4,853,125**  
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Tex., Orange.—Orange State Bank of Orange approved; capital \$25,000; guaranty fund plan. A. M. H. Stark is Pres., W. W. Armstrong Cashr.

Tex., Poyner.—Bank reported organized with B. Sigler, Pres., and Chas. Scarborough, Cash., Athens; W. H. Foster, V.-P., Poyner.

Tex., Walburg.—New bank is being organized by Gus Deering, Henry Deering and A. W. Speckles.

Tex., Waxahachie.—Guaranty State Bank of Waxahachie approved; capital \$150,000; guaranty fund plan; W. K. Ward, Pres.; Walter Acker, active V.-P.; G. C. Wagoner, Cashr.

Tex., Whitehouse.—Chartered: Guaranty State Bank; capital \$10,000; J. R. Hagan, Pres.; E. P. Stone, Secy. Business is to begin about Sept. 15.

Va., West Point.—Chartered: West Point National Bank; capital \$25,000. P. B. Hughes, J. Crosby Thompson, J. W. Wilkinson, Dr. J. F. Steer and M. V. Sparklin. Business will begin Oct. 1.

W. Va., Flemington.—Bank of Flemington, chartered with \$25,000 capital, will begin business about Oct. 1 with G. Ona Shusel, Pres.; M. L. Shields and J. B. Cather, V.-Ps.; T. J. Winter, Secy., and O. E. Wyckoff, attorney; Guy Williams, Grafton, Cash.

W. Va., Huntington.—Young People's National Bank has made application to organize; capital \$100,000; R. Franklin, L. J. Coffman, A. M. Gilmore, I. J. Maynard and H. Solomon.

### NEW SECURITIES.

At 2 P. M. Sept. 15 Robert Dunlop, State Treasurer, will sell \$2,967,122.19 of 4½ per cent. funding bonds; denomination \$1000, \$500 and \$100; dated Oct. 1, 1913; maturity October 1, 1924.

Fla., Clearwater.—Bids received until Oct. 1 for \$10,000 20-year district 2, Clearwater; \$65,000 20-year district 3, St. Petersburg; \$16,000 20-year district No. 8, Largo; \$4000 10-year district No. 12, Gulfport, 6 per cent. Pinellas county school bonds. Address Dixie M. Hollins, Supt. Public Instruction.

Fla., Lake City.—Bonds voted as follows: Payment of 8 per cent. outstanding notes \$43,200; outstanding indebtedness against water and light plant \$3000; present outstanding indebtedness against city \$23,000; building city hall \$8900.

Fla., Marianna.—John Nuveen & Co., Chicago, purchased at 95, less interest, \$100,000 of Jackson county 5 per cent. road bonds. W. J. Singletary is chairman, Board of County Commrs.

Fla., Punta Gorda.—Oct. 7 city will vote on \$100,000 of bonds for street improvement and redeeming certain bonds.

Fla., Sanford.—\$50,000 of 6 per cent. 10, 15 and 20-year improvement bonds for streets and sewers voted Aug. 19 will be sold; J. C. Higgins, G. H. Fernald and S. O. Chase are bond trustees.

Fla., Tarpon Springs.—City plans to issue \$25,000 paving, \$15,000 sewerage and water-works, \$15,000 city hall and \$5000 park bonds. Address The Mayor.

Fla., Tampa.—Sept. 2 College Hill special tax school district No. 17, Hillsborough county, will vote on \$13,000 6 per cent. school bonds; denomination \$1000. Marshall Moore, Secy.; William Schneider, Chrm., Hillsborough County Board of Public Instruction.

Fla., West Palm Beach.—Special school tax district No. 1 of West Palm Beach has voted \$35,000 of school bonds for building. Address Secy. of School Board.

Ga., Austell.—Voted: \$12,000 water-works, \$8000 sewer, \$5000 street improvement bonds. Address The Mayor.

Ga., Dawson.—Hoehler & Cummings, Toledo, purchased at par \$12,000 5 per cent. fire, water and light bonds. Address The Mayor.

La., Homer.—Clalborne county has voted \$50,000 of bonds as bonus to Louisiana Electric Co. Address County Clerk.

La., New Orleans.—The \$3,000,000 of dock and warehouse bonds to be issued by city will be 15-20-year 5 per cents; maturity May 1, 1934, up to May 1, 1934, in sums of \$100,000 annually. Address Board of Port Commissioners.

Md., Annapolis.—Bids will be received until noon Oct. 2 for the following 4 per cent. State bonds: State Loan of 1912, \$274,000; Consolidated Loan of 1913, Series B, \$200,000; Second Insane Hospital Loan, Series B, \$400,000; Maryland State Normal School Loan, Series B, \$300,000. Phillips Lee Goldsborough, Governor; Emerson C. Harrington, Comptroller; Murray Vandiver, Treasurer.

Md., Kensington.—It is proposed to hold election May 14, 1914, to vote on sewerage bonds. C. R. Hughes, clerk.

Miss., Hazlehurst.—B. Shelton, clerk, Copiah county, will receive bids until 2 P. M. Sept. 3 for \$75,000 6 per cent. 20-year road bonds.

Miss., Raleigh.—Sept. 1 district No. 1, Smith county, will sell \$30,000 of 25-year road bonds; interest 5 or 5½ per cent. Address Chancery Clerk. B. S. Snowden, highway engineer in charge.

Mo., Boonville.—Voted: \$25,000 street-improvement bonds. Address The Mayor.

N. C., Burnsville.—Bids received until noon Sept. 22 by H. D. Hughes, Secy., Board of Road Commissioners of Yancey Co., for \$150,000 5 per cent. road bonds.

N. C., Charlotte.—Bellonby & Whaley, Augusta, Ga., it is reported, have been awarded at \$110,025 and interest \$110,000 of 4½ per cent. 20-year improvement bonds of Mecklenburg county; denomination \$1000; dated Sept. 1, 1913. W. M. Long is chairman and W. F. Stevens, clerk County Commissioners.

N. C., Casar.—It is contemplated to issue \$10,000 of bonds to build a railroad extension of 9 miles to Casar. Zero Mull of Casar may give information.

N. C., Fayetteville.—Drainage Commissioners, Flea Hill drainage district, Cumberland county, give notice that they propose to issue \$80,000 6 per cent. bonds; denomination \$1000. Drainage Commission: W. A. Beard, Secy.; J. B. McPhail, S. J. McLaurin.

N. C., Wilmington.—New bids received Aug. 25 by the County Commissioners for \$50,000 of road and \$75,000 of school 5 per cent. 25-year bonds were rejected, and it was decided to postpone further efforts to market the securities, perhaps until Jan. 1. It appears that the law requires they shall be sold to net not less than par.

Okla., Cleveland.—City proposed to call election to vote on bonds for water-works. Address City Commissioners.

Tenn., Centerville.—Hickman county is offering for sale \$17,500 of 6 per cent. 5-20-year bridge bonds. T. Sawyer is clerk, County Court.

Tenn., Knoxville.—Chas. Mitchell, Knoxville, awarded at par, interest and expense of printing \$20,000 6 per cent. street paving bonds and \$16,282.54 refunding bonds. D. G. Leahy, recorder.

Tex., Austin.—The Attorney-General has approved school district bonds as follows: Erath county, No. 9, \$3000 20-Is, 5 per cent.; Grimes county, No. 3, \$1000 20-Is, 5 per cent.; Grimes county, No. 2, \$1500 20-Is, 5 per cent.; Smith county, No. 17, \$1500 20-Is, 5 per cent.; Comanche county Independent, \$1500 20-Is, 5 per cent.; Ore City Independent, \$5000 40-20s, 5 per cent.; Tell Independent, \$2500 20-Is, 5 per cent.; Smith county, No. 71, \$500 20-Is, 5 per cent.; Grimes county, No. 1, \$3000 20-Is, 5 per cent.; Lakeview, Hall county, Independent, \$6000 40-20s, 5 per cent.; Grimes county, No. 18, \$1300 20-Is, 5 per cent.; Limestone common school, No. 64, \$7500 20-Is, 5 per cent.; also Rockdale water-works, \$27,000, 50 serially, 5 per cent.; Trinity county courthouse, \$50,000 40-10s, 5 per cent.; Crosby county courthouse and jail, \$40,000 40-10s, 5 per cent.; Amarillo funding, \$54,000 20-20s, 5 per cent.; City of Belton public

school improvement, \$45,000 40-10s, 5 per cent.; City of Belton water-works, \$20,000, third series, 40-10s, 5 per cent.

Tex., Big Springs.—L. T. Deats, Mayor, writes city will not issue any water-works bonds. This denies recent press report.

Tex., Bishop.—Voted: \$23,000 sewer and \$14,000 road bonds. Address The Mayor.

Tex., Bonham.—Issue of \$8000 sidewalk bonds under consideration.

Tex., Bullard.—Voted: \$30,000 road bonds. Address The Mayor.

Tex., Corpus Christi.—City has for sale \$20,000 of garbage incinerator bonds. Roy Miller, Mayor.

Tex., Galveston.—The Galveston County Commissioners have rescinded their order for an election Sept. 26 on \$300,000 of seawall bonds. The election for \$250,000 of good-roads bonds will, however, be held on that date.

Tex., Gause.—W. T. Montgomery, San Antonio, bought at par \$50,000 of district road-improvement bonds, 5 per cents, 40 years, denomination \$1000; W. B. Porter, Gause, official in charge.

Tex., Hempstead.—Sept. 25 road district No. 5, Waller county, will vote on \$15,000 of road and highway bonds. Address County Commrs.

Tex., Jayton.—Bids received until Sept. 10 for \$12,500 5 per cent. 40-year independent

school district bonds; denomination \$1000; dated July 15, 1913. Address W. M. Morrow.

Tex., Laredo.—A new city bond issue to refund bonds which matured July 1 is reported contemplated. Robert McComb is Mayor.

Tex., Runge.—Voted: \$20,000 water-works and electric-light-plant bonds.

Tex., Richardson.—C. C. Huffines, Secy., Board of Education, is receiving bids for \$16,000 of Richardson Independent School District bonds.

Tex., Rosenberg.—A. W. Meyer, Mayor, says: "Bond issue for \$18,500 for water-works pending; bond issue for \$12,500 for street improvement pending. Election will be ordered next month (Sept.)" This, therefore, denies recent report that \$6000 water-works bonds were sold.

Tex., Yorktown.—Voted: \$8900 city hall bonds.

Va., Bristol.—City proposes to issue 20-30-year bonds for erection of high school costing \$45,000 to \$50,000. Address Supt. of Schools.

Va., Culpeper.—Local parties are reported to have purchased \$16,000 5 per cent. Catalpa road district bonds. Address W. E. Coons.

W. Va., Warwood.—Bids received until 3 P. M. Sept. 30 by C. H. Dowler, C. H. Eberts, bond commissioners, for \$4000 of 5 per cent. 1-10-year street improvement bonds. Denomination \$500.

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It has one hundred and seventy-five acres, on which are a nine-hole golf course, five athletic fields, swimming pool, quarter-mile cinder track, tennis courts and batting cage.

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